TV GAMER

The players guide to games on screen.

85p
MAY 1984

20 GAMES FROM THE MOVIES

NEW GAMES
16 REVIEWS

IN DEPTH
5 **BIG** GAMES

HARDWARE
TI 99'S NEVER DIE
SHARP'S MACHINE

ARCADES
3 MIND-BOGGLING GAMES

DOUBLE PRIZE QUIZ
SHARP MZ-700
TI 99/4A
SEE PAGE 20

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Atari home computer, Coleco,
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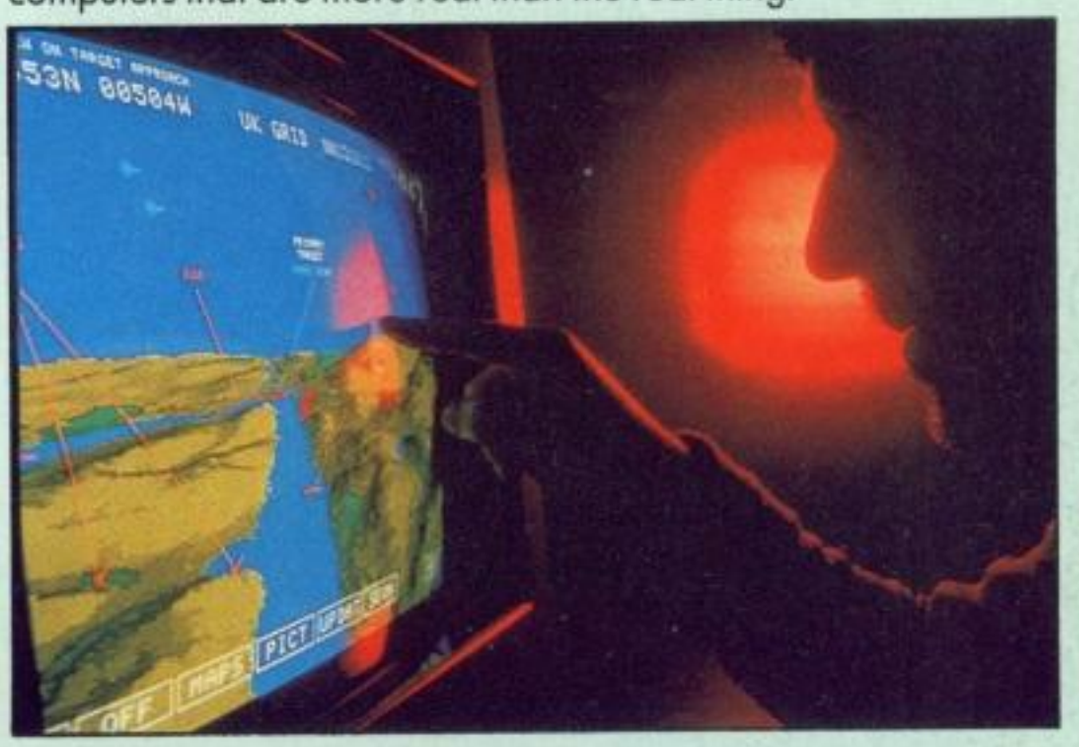

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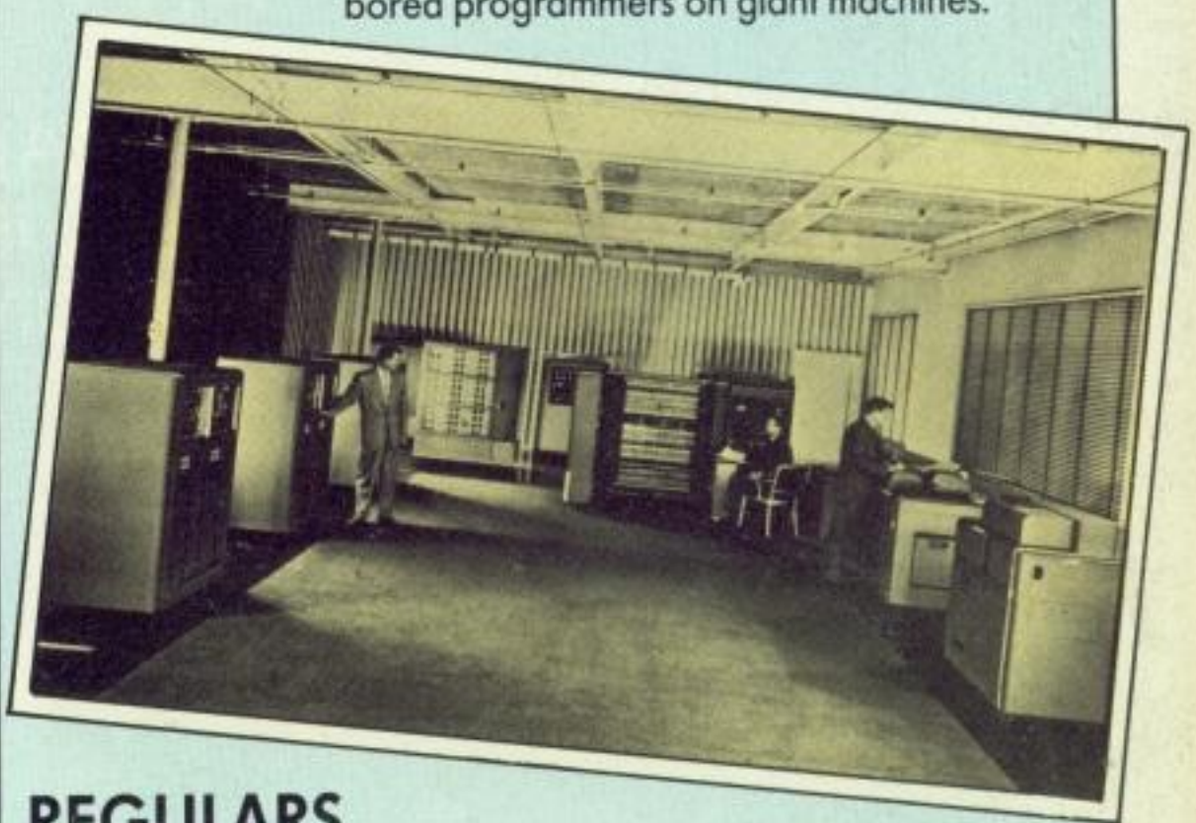

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IF YOU CAN FIND A MORE ADVANCED VIDEO GAMES SYSTEM IT WON'T BE ON THIS PLANET.

(So materialise at your local dealer for a try-out)

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In depth with TV Gamer

From the hundreds of letters we've had from all you readers out there, we've found that the most popular feature in the new-look *TV Gamer* is undoubtedly the In-depth Reviews. This month we've squeezed in five, including Dave Harvey's mammoth second half of *Raiders of the Lost Ark* from Atari for VCS. Dave's review this month concentrates on getting you round the course for maximum points. Meanwhile, Dave Trutzenbach, who disentangled *Mr Do* for you in our March issue, has found another big maze game, *Lady Bug*, to try the Trutzenbach high-score system on. Dave Bishop (yes, *TV Gamer* does have more than its fair share of Daves) has been hammering his Atari Home Computer to build up a massive score in *Miner 2049er*, and Chris McDonnell has been taking a very close look through his bombsights at *Scramble* from Vectrex.

Finally, the indomitable Dave Harvey seems to have found time to peer at *Defender* through his cockpit monitor, to save the planet for decent humanoids.

Mike Roberts' final instalment of the Games Governments Play series finishes off this month with some multi-million-pound super screen games played by generals. Now, while few of you *TV Gamer* readers are NATO generals, most can get along to the arcade to play with machines sophisticated enough to cost several thousand pounds. So again this month, Andy Harris has gone along to his arcade, pockets stuffed with tenpences, to tell you what goodies you'll find there and how to get your money's worth.

Although most readers' letters have congratulated *TV Gamer* on its new look and on the introduction of computer games to its pages, naturally there are some of you who want to stick to the dedicated games systems. Fear not. Now that we have turned monthly, we will still continue to list all the new cartridge games as they become available. While computers cost a bit more than dedicated games systems, generally speaking the games themselves are much cheaper and, because the home computers have a lot more memory, the games are often much more sophisticated. So, we are reviewing the latest computer games, too.

At last we are able to announce the winners of the Colecovision contest in our Autumn issue. The comp asked readers to put a caption to the *Donkey Kong* screen picture which is supposed to show Mario trying to rescue his girl from the clutches of the mighty ape, Kong. Here is what Mario is really saying, say the five winners:
"I'm from the gas company – someone said you wanted a griller removed", earns Derek Tait of Plymouth the first prize of a CBS/Colecovision console and module one; and an Atari adaptor, together worth over £200. Second prize – a Suncom Joy-Sensor Controller worth £29.95 – goes to Scott Taylor of Bedford for "A good job in computers, the ad said!" Third prize – a Suncom TAC 2 Controller worth £18.95 – goes to Alexander Morris of Chelmsford for "There must be an easier way up when the lift's stuck". Fourth prize – a Suncom Starfighter Controller worth £13.95 – is won by S. French of London E4 for "This is the last time I try computer dating", while Richard Wood of Chatham receives fifth prize – a Suncom Slik Stick Controller worth £9.95 – for "I wish that mother of hers would stop trying to interfere".

Next issue I'll be announcing the winners of our bumper Christmas competition from the Winter issue.

John Sanders

REVIEWERS STILL REQUIRED
We need more reviewers for the following systems:
VIC-20, COMMODORE 64, BBC B, SPECTRUM, ORIC, AQUARIUS
Please write to TV Gamer,
187-195 Oxford Street, London W1R 1AJ.

NEWS • NEWS • NEWS •

Tiswas star becomes gamer

A BRAND new idea for a brand-new pastime has been launched with the help of *Tiswas, OTT* and *TVam* star Chris Tarrant. Called, modestly, *The World's Greatest Computer Games*, it's a video cassette program which you can borrow from those video shops that also do a trade in computer games. Chris is the presenter of the half-hour program, commenting on and playing the games, which include some of the most visually exciting ones now available for the home computer. Altogether 21 games are featured on the tape, from animated soccer to mysterious adventures, from three-dimensional mazes to stunning alien-blasting arcade-type games.

Making the program proved to be a big headache for executive producer Norman Thomas who was faced with having to connect seven different computers into the video recording equipment in a single day, while running 35 bits of computer software.

TV Gamer's editor, John Sanders, had a chance to watch the first program in the series. Verdict? "It's a smash hit! Chris Tarrant provides fine entertainment and this is really a fine way to get a preview of lots of new games in a very short time. The program lets you see a lot of games, and helps to whittle your choice down to the handful you really fancy. It'll never replace *TV Gamer*," says John, "because you still need to assess how well the game plays, and for that you've got to have a good review".

Kempston's new joysticks

ADDED TO the Kempston joystick range are two new models. In our picture the familiar Pro 5000 at £13.50 on the left has the £11.50 Interface for the Sinclair ZX computer. In the centre is the new Pro 3000 at £12.75 with its ergonomically designed grip handle with both a top fire-button for arcade-style control. On the right is the new Pro 1000 at £10.99 which has eight-way leaf switches for precision control and a five-foot cable. The fire bar at its base is suitable for right or left-handed play. Kempston joysticks use an Atari-type plug.

Graphics on the 64

COMING THIS Autumn for Commodore 64 users is this touch-sensitive computer graphics pad. Called "Animation Station" and made by Suncom for Consumer Electronics Ltd, the gadget works with special cartridges which slot into the computer, bypassing the keyboard. Not only will the user be able to draw his or her own pictures and cartoons onto the screen, but the system will let the characters move around the screen, too. Consumer Electronics, who expect the Animation Station to cost around £80, say that versions for other home computer systems will follow soon.

Wise monkeys?

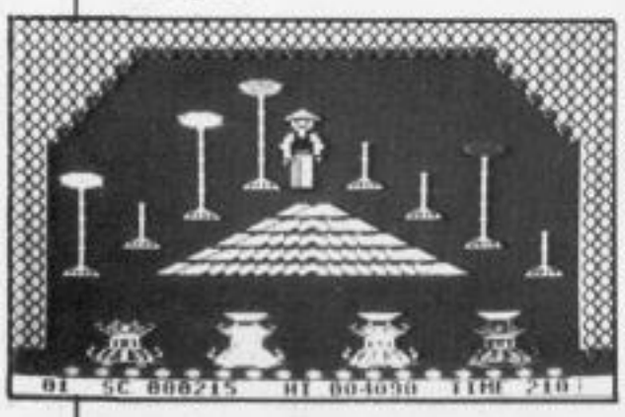
NO, IT'S not feeding time at London Zoo – it is in fact the design team of none other than Imagine. These four loons are the programmers behind many of the hit games Imagine have conceived, such as *Alchemist, Stonkers* etc. We just thought you'd like to see what sort of conditions your games are dreamed up in; frightening, isn't it?

Oriental speciality act

A GAME with an unusual international pedigree, *Chinese Juggler* has been launched by Ocean Software on an unsuspecting public. *Chinese Juggler* has been designed by a Hungarian couple who bought themselves a computer while travelling in the West – it is, say Ocean, unique.

The aim of the game is to manipulate the juggler so that he spins eight plates on rods within a given time limit. There are twelve screens – as the curtain comes down on each successful act, the juggler jumps up and down for joy. But each successive screen becomes more difficult, with bonus points awarded for spinning and juggling certain colours of plate.

Chinese Juggler is first out on the Commodore 64 at a take-away price of £6.90, with 48K Spectrum and BBC versions to follow soon.



Computer fights back

YOUR LOCAL arcade game is likely to get tougher if a new development by Atari of California catches on. The clever Atari people have realised that arcade owners despair when a champ comes up to the console and spends several hours on the machine for twenty pence. The new idea is to make a game that adjusts to the skill level of the player.

The skill is measured by the machine over several games and the player's average score is stored in the machine's memory. So, the machine gets incredibly tough on the champs, while letting the beginners in for an easy game.

Atari's first game for the system is *Red Baron*, where the player has to bomb enemy tanks and pillboxes and shoot planes. The computer controls these enemy forces making them faster-shooting and more accurate as the player's skill increases.

Book of the game of the book

MELBOURNE HOUSE, probably tired of the hundreds of telephone queries about *The Hobbit* adventure game, have published a book, *A guide to playing The Hobbit*. Says a spokesperson from Melbourne House: "The beauty of the book is that it does not spoil the fun and challenge of the adventure. It does not supply THE solution to *The Hobbit*; it only offers one of many possibilities. So even the keenest adventure fan will have to admit it is an essential aid to anyone who owns the game." Price is £3.95. □

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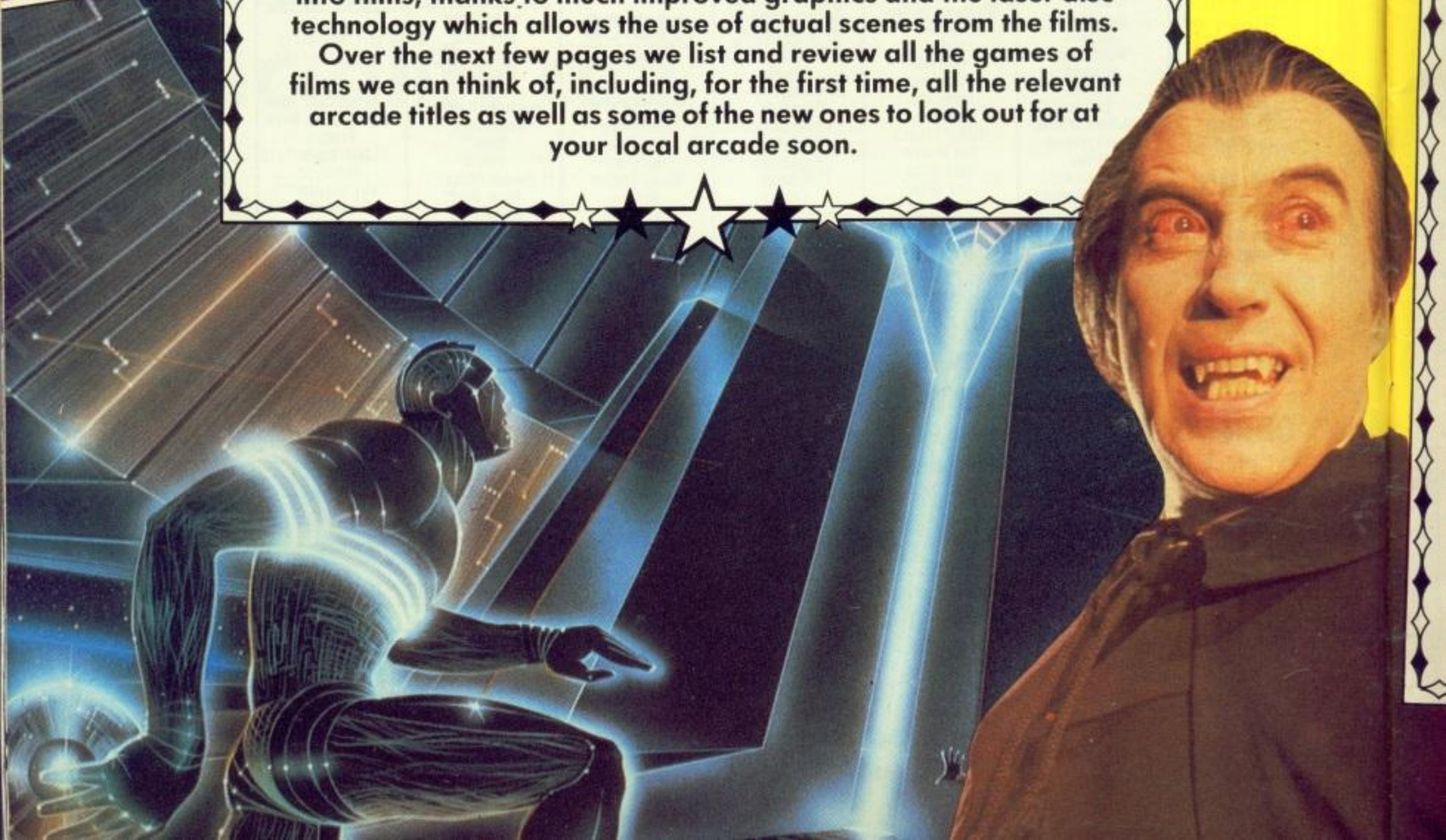
GAMES from the MOVIES

Since the beginning of movie history, filmgoers have always wanted to act out their fav film hero's parts. Nowadays it's much easier to do so, thanks to video games.

Most people think that *Star Wars* was the first inspiration for a video game tie-in but in fact it was *Star Trek* which inspired the first of this breed of game on the big mainframes back in the late '60s.

After the *Star Wars* phenomenon, many official and unofficial game titles were spawned, the vast majority of which featured the Death Star trench scene from the original film. It was then that programmers realised that gamers wanted games that put them into their favourite films or TV series. This inspired games like *Superman* which, although reasonably realistic, weren't very true to the film. Only now are we seeing games that truly put you into films, thanks to much improved graphics and the laser disc technology which allows the use of actual scenes from the films.

Over the next few pages we list and review all the games of films we can think of, including, for the first time, all the relevant arcade titles as well as some of the new ones to look out for at your local arcade soon.



CHINA SYNDROME

SPECTRAVISION £9.95
1 4 variations
VCS

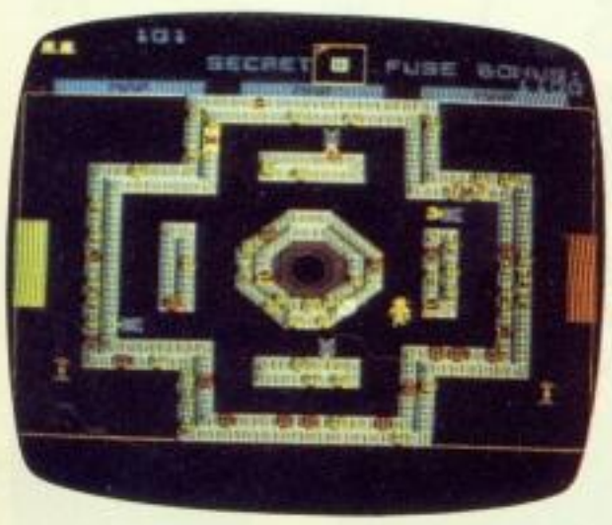
Loosely based on the film in which a nuclear reactor goes out of control. It's now up to you to control the reactor through its nine levels down to the core. As in *Reactor*, you are given a robot which you must use to destroy all the dangerous radioactive particles that escape. One of the nice features of this game is a little control panel that shows the radiation level in each of three sectors on the screen. If you get above a certain level of radiation then MELTDOWN begins – and you lose.

Value 2, Graphics 2, Sound 2, Gameplay 2

CLOAK & DAGGER

ATARI
COIN-OP
1,1+1

This game sets the scene for a new film of the same title for summer this year, which features Agent X, a green clad spy who's out to retrieve the plans stolen by the evil Dr Boom.



To do this Agent X must venture into Dr Boom's underground bomb factory and destroy it. What really makes this game special are the little comical interludes when Agent X takes a breather in the lift between floors. Sometimes he'll whistle, sometimes he'll smile and give you a thumbs up – it all depends on your performance in that round. I've seen five but there may well be more.

Fans of *Robotron 2084* will take to this one straight away as it uses the same controllers (one joystick to move, another to fire). However, this is still an enjoyable game for the rest of us.

I wonder what the film's going to be like?

Value 4, Graphics 3, Sound 3, Gameplay 4

COMPUTER WAR

THORN EMI
ATARI HCS
T199-4/A
VIC 20 (with 8K expansion)
1 single game

A very good game but not really very close to the film *War Games*. The aim is to stop an imaginary onslaught of nuclear missiles targeted at various US bases. You select which missiles you're going for on the strategy map and go to the battleview so that you can knock out the missiles. You are presented with a code to crack on the strategy map for bonus points. Having done that you can take one of the US bases off alert. You have won the game when all your bases are taken off alert.

A good game and a pleasant change from the norm.

Value 3, Graphics 4, Sound 3, Gameplay 4

DISCS OF TRON

BALLY/MIDWAY
1,1+1

The programmers at B/M obviously have taken a lot more time over this game and the result is far more pleasing than the first *Tron* coin-op which perhaps was rushed out in time for the film.

Discs of Tron, as the name suggests, is a disc battle which takes place on the rings that appear in the film. The idea is to bop the evil Sark as many times as you can before he gets you.

This is a better game than the first *Tron* coin-op thanks to the superior graphics, sound and gameplay.

Value 4, Graphics 4, Sound 4, Gameplay 4

DRACULA

IMAGIC £29.95
1,1+1,1v1 3 variations
VCS

If you're a fan of all those horror movies with vampires in them, then this game is for you. You portray the Prince of Darkness, Dracula. As Count Dracula you can transform yourself into a bat and change your victims into zombies that will attack the local police who pursue you with wooden stakes. You must keep the Count's blood supply topped up as he will die if you do not. Altogether a challenging and enjoyable game.

Value 3, Graphics 3½, Sound 3, Gameplay 4

FIREFOX

ATARI COIN-OP
1,4 variations

After the success of Atari's *Star Wars, Firefox* looks set to do equally great things. This is Atari's first laser disc game and has to be good if it's to live up the the reputation of these games.

The idea is to assume the role of Major Gant (Clint Eastwood) who has just stolen Russia's most technologically advanced fighter, known to the trade as Firefox. Having stolen it, you must now fly it safely out of Soviet territory. However, the Russians don't seem too pleased about the whole incident and are rather keen on having you shot down.

In order to escape from the area you must do several things: avoid being detected by infra-red tracking stations (not being detected will earn you bonus points), shoot down as many enemy fighters as possible, and consume as little fuel as possible (fuel is a key element of the game).

Throughout the game you

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Hi-soft Pascal Compiler 64K Colour Version Has been developed to provide an almost full implementation of Standard Pascal supporting all the data structures (except files) including Arrays, Sets, Records, Pointers and User - enumerated types. Assignment of structured types is permitted. Sets, Strings and Pointers may be compared. The object (machine) code produced may be saved to tape, together with the runtimes by a simple command and subsequently reloaded and executed independently of the compiler. The package comes with extensive documentation and many example programs. Available from Sharpsoft Ltd = £40.25. Including printer plotter routines. Which are exclusive to Sharpsoft Ltd. (printer plotter routines available with documentation separately).

Hi-soft DEVPAC DEVPAC combines a full Z80 assembler with a powerful disassembler and debugger. Both assembler, disassembler/debugger are fully relocatable and may be placed anywhere in the memory of your machine.

"Your Computer" said *"DEVPAC is most highly recommended"* (May 1983)

"Which Micro" in which Adam Denning said *"If you write programs in machine code, buy DEVPAC – nothing else will do"* (September 1983).

This fantastic development package is now available on the MZ 700 from Sharpsoft Ltd at only £25.00.

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MZ 700 GETS COMPILER

INVESTORS IN SUN CASH IN ON ISSUE PROMOTIONS

Sharpsoft User Notes "SUN" is the only regularly published magazine exclusively for the MZ 700 computer and MZ 700 programers. Keeping you right up to date with the very latest MZ 700 developments. SUN publishes programing tips, listings and helps resolve those difficult problems that you can never find the answer to. SUN now available direct from the publisher at a reduced rate of only £3.00 (£6.00 overseas). Make cheques/P.O. payable to SHARPSOFT LTD. and send to **SUN 700 Subscriptions, Sharpsoft Ltd., 2nd Floor, Crisallen House, 86-90 Paul Street, London EC2A 4NE. ENGLAND**

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Subscribers enjoy up to 20% reduction on special offers on new software titles with each issue of SUN.

GAMES from the MOVIES

Continued from page 11

will hear Clint making the odd comment like 'I'm gonna take 'er down', in addition to the continuous music soundtrack and sound effects. The visuals are fast and furious with none of the dead spots so often found in laser disc coin-ops. This is thanks to a new scanning technique which Atari have developed.

If you liked the film, you'll love the game which really puts you into the movie. There are stand-up and cockpit versions available, both equipped with a stereo head-phone socket with volume control; a very nice extra which we may well see more of in the future.

Value 3, Graphics 5, Sound 4, Gameplay 4

RAIDERS OF THE LOST ARK

ATARI CX2659 £29.99
1 single game
VCS

This adventure game is based on the highly successful film by Steven (E.T.) Speilberg and George (*Star Wars*) Lucas. The goal is to find the Well of Souls which contains the fabled lost Ark of the Covenant.

To begin your search, you must first find the Map Room. There the Lost Ark's location is revealed (naturally, this is different for each game) and so you start on your journey. En route you must pick up many treasures and also deal with the various traders of the Black Market.

A fascinating game that takes some working out. Of course, seeing the film helps as well.

Value 4, Graphics 4, Sound 3, Gameplay 4

RETURN OF THE JEDI – DEATH STAR BATTLE

PARKER £34.95
VCS
ATARI HOME COMPUTERS
SPECTRUM 48K(coming soon)
1 single game
SCI FI SHOOT 'EM UP

As pilot of the Millenium Falcon it's your task to destroy the Death Star. To do this you must first destroy at least three TIE Interceptors. Then a hole will appear in the force field which the Falcon must slip through. Once through, it must break through the wall of the

Death Star and hit the red square in the centre to blow it up.

Quite a good game but not really sticking to what happened in the film.

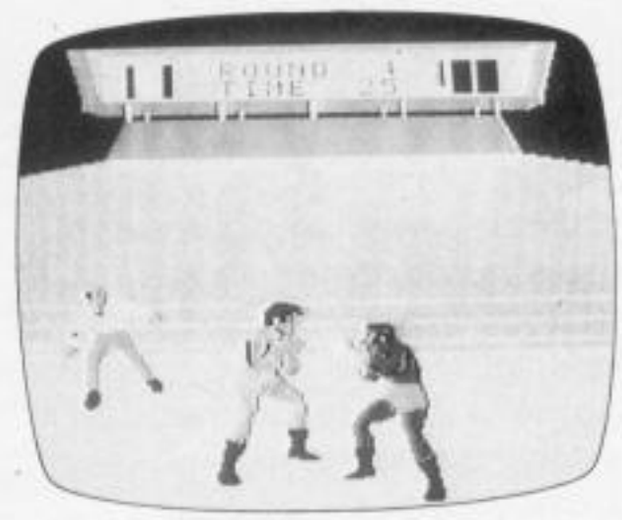
Value 3, Graphics 3, Sound 3, Gameplay 4

ROCKY

CBS ELECTRONICS £29.95
1,1+1 8 variations
COLECOVISION
SPORT

A brilliant demonstration of the high resolution graphics of the Colecovision. The player can take the part of either Clubber Lang or Rocky in a match against the computer or alternatively play a head to head game against another opponent.

Rocky and clubber weave and bob about the ring trading punches or stand toe to toe in a vicious brawling match. The referee takes an active part, separating the combatants in the clinches, counting over a fallen boxer, or pronouncing a knock-out.



The game has a demonstration made which enables you to see how to make the most of the four features: head punches, body punches, head and body guarding and ducking.

A must for all those who saw the three *Rocky* films. The use of the new Colecovision Super Controllers may mean that the game will be more expensive than normal. However, the Super Controllers are easy to use, with a responsive joystick and comfortable hand grip.

Andy Pike

Value 4, Graphics 4½, Sound 3, Gameplay 4

SORCERER'S APPRENTICE

ATARI CX26109 £24.95
1 single game
VCS

This game is based on Walt Disney's *Fantasia*. In it you control a little Mickey Mouse clad in red robe and hat. There are two play scenes. One is on the mountain tops where you try to catch falling stars and magically zap streaking comets and thunder clouds. The other is in the Sorcerer's cavern where you attempt to stop all the bucket-carrying mops from flooding the caves. You can play one or other of the two scenes or you can alternate between the two. Not the most

GAMES from the MOVIES

Continued from page 13

difficult game ever created but then it is designed for the younger gamers. The graphics are pretty good and overall the game is to be recommended to young gamers and Walt Disney fans.
Value 3, Graphics 4, Sound 3, Gameplay 3

STAR WARS – JEDI ARENA

PARKER 931507 £29.95
1,1v1 8 variations paddles
VCS

Although this isn't actually based on any of the films, it is inspired by some of the ideas. It is basically a Lightsabre duel with the help of a Remote, a little droid about the size of a snooker ball. Both you and the other Jedi are surrounded by protective walls made up of bricks that can be knocked out by aiming the Remote carefully. The rays from your opponent's sabre can be deflected by swinging your Lightsabre and blocking the shot. The battle rages until one of the Jedis wins three matches.
Value 3, Graphics 3, Sound 2, Gameplay 2

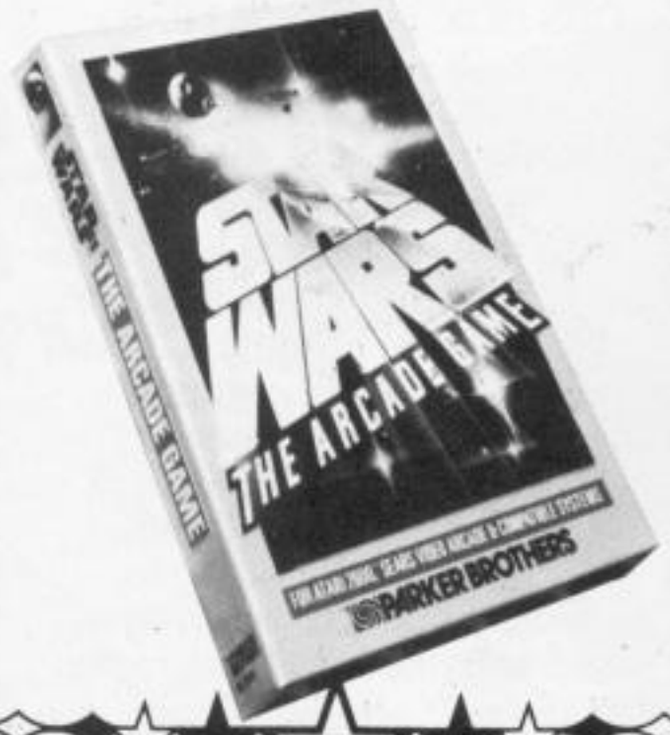
STAR WARS

ATARI COIN-OP
PARKER
PREVIEW
VCS
G7000
ATARI HCS
COMMODORE 64
COLECOVISION
ZX SPECTRUM
(requires ZX interface 2)
1,4 variations

Justifiably a very popular coin-op which is soon to become a home game from Parker.

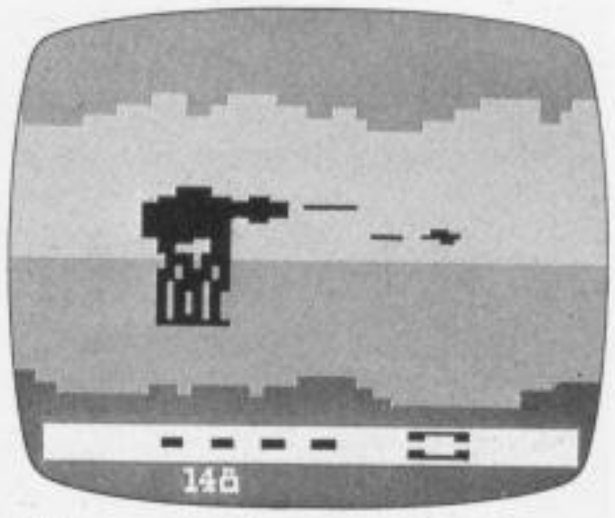
The game is in three stages. The first is a TIE fighter attack in which you have to shoot down as many fighters as you can in an allotted time. In later rounds Darth Vader's personal fighter joins the battle. He can't be destroyed, but shooting him will send him tumbling off into space. Having flown your X-Wing to the Death Star you now fly just above the surface, destroying red bunkers and the tops of yellow towers. Then you fly down into the trench which is bristling with laser cannons on either side. At the end of the trench lies the thermal exhaust port which must have a proton torpedo launched in its general direction.

Star Wars is certainly the best non-laser game to come from 1983. As for the home translations, I'm afraid I can't comment. All will lose a little due to the fact that the coin-op is Vectorscan. We shall have to see what Parker can do.
Value 4, Graphics 4, Sound 4, Gameplay 3



STAR WARS – THE EMPIRE STRIKES BACK

PARKER 93501 £29.95
1,1+1 32 variations
VCS
INTELLIVISION



This game depicts the battle on the ice planet Hoth in Episode V of the *Star Wars* saga. You have control of a rebel Snow-speeder armed with a front-mounted laser cannon. Your task is to prevent the advance of the Imperial Snow-Walkers for as long as possible. A large number of hits are needed to destroy a Snow-Walker but occasionally a bomb hatch will open and begin flashing, and if you can hit it you will destroy it straight away. Your speeder can sustain up to three hits but it can land in a valley for repairs. Every two minutes the 'Force will be with you' and you are impervious to the Imperial laser fire for a while.
Value 2, Graphics 2, Sound 2, Gameplay 3

SUPERMAN

ATARI CX2631 £24.95
1 single game
VCS

Assuming the role of the Man of Steel, the object is to put a number of crooks in jail (including the elusive Lex Luthor), re-assemble the Metropolis State Bridge and avoid the dreaded Kryptonite.
Value 2, Graphics 2, Sound 2, Gameplay 2

TERRAHAWKS

PHILIPS
G7000
1,1+1

The only thing this game has to do with the popular TV series is the title, which they both share. Other than that there is no resemblance whatsoever. In fact, this game was released quite a while ago under a different title in the US. When Philips heard that they had the rights to the TV series, could they have just stuck the name on the next space game they produced? The game itself is quite good by G7000 standards. It's a sort of *Galaxian/Phoenix*-type game, however, so it's unclear why it should have the *Terrahawks* title? Why didn't they try to copy the game that Dr Ninestein plays in the series?
Value 3, Graphics 2, Sound 1, Gameplay 2

TRENCH

VIRGIN GAMES
BBC MODEL B
1 9 variations
SCI FI

No prizes for guessing which scene in which film this game was inspired by. Put it this way: the object of the game is to destroy the Termination Planet using Proton Torpedoes.

Guess how you destroy the Death Star, oops sorry, I mean Termination Planet.

In all fairness I should say that this is an excellent game which will certainly keep your fingers dancing on the keys of your beeb.
Value 3, Graphics 4, Sound 3, Gameplay 4

TRON

BALLY/MIDWAY
COIN-OP
1,1+1

This game was released at the same time as the film and sets out to recreate some *Tron*-like games. You can choose between four games: *Light Cycle*, a *Surround*-type game which is probably the most indicative of the film; *Tanks*, a

sort of maze shoot 'em up; and *MCP Cone* which is a variation of *Breakout*.

In other words Bally/Midway have tried the same trick as they did with *Gorf*. That is, taking a handful of semi-reasonable games and turning them all into one big game. It worked with *Gorf* but not with *Tron*, alas. DW
Value 3, Graphics 3, Sound 3, Gameplay 3

TRON DEADLY DISCS

MATTEL ELECTRONICS £21.95
1 4 variations
INTELLIVISION

This is the first in the trilogy of *Tron* cartridges based on Walt Disney's film.

Beginning with a little red Tron figure in the centre of a game grid, a series of three doors open and three Blue Warriors run out, throwing their discs at Tron who must avoid them and use his own to retaliate. After this, another wave of warriors appears. While this is happening, you're trying to block the doorways, either by running into them or throwing your disc at them. Once you have blocked two on opposite sides of the screen you can have a wraparound escape route rather as in *Pac-Man*. If you knock out too many doors, a Recogniser will come to fix them. However, if you manage to wound him while he is mending a door you can send him lurching off the screen, sparks flying. A game with wide appeal.
Value 3, Graphics 3, Sound 3, Gameplay 3

TRON – MAZE A TRON

MATTEL ELECTRONICS £25.95
1 4 variations
INTELLIVISION

Probably the poorest of the three *Tron* games available. The game is set on a series of four scrolling circuit boards along which you have to run until you find the one with your target – the MCP (Master Control Program). As this relies on luck rather than skill, the game can be infuriating.
Value 2, Graphics 2, Sound 2, Gameplay 1

TRON SOLAR SAILER

MATTEL ELECTRONICS £29.95
1 single game
INTELLIVISION
Needs Intellivoice module
£45.95

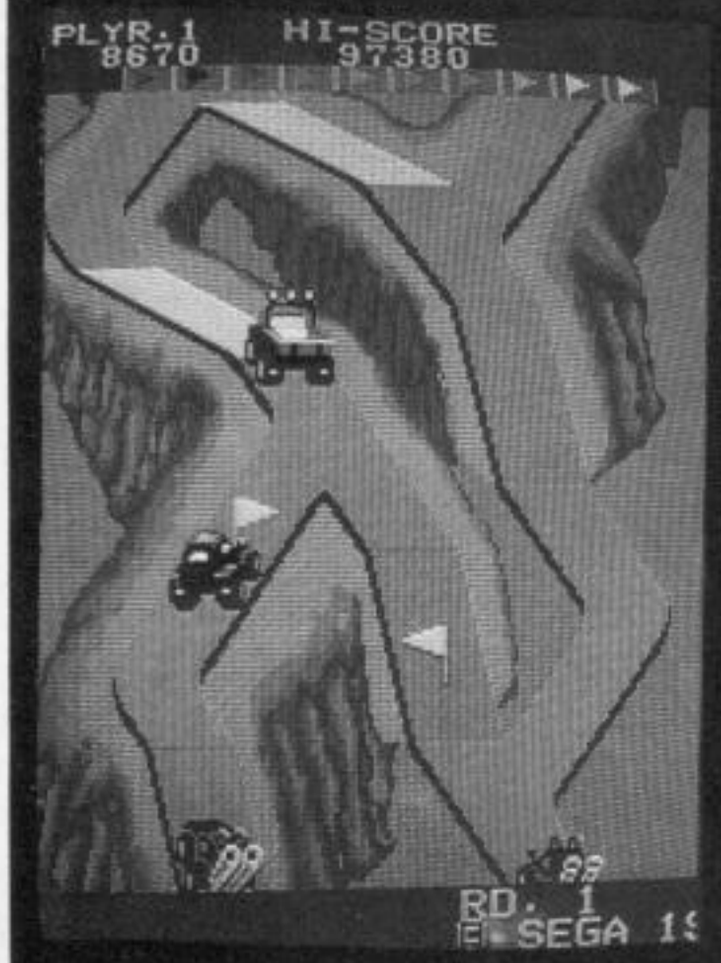
The third and easily the best of the *Tron* games available. As it needs an Intellivoice, it works out to be fairly costly. This game depicts the final scene in the film where Tron, his girl-friend Yori and 'User' Flynn steal the prototype craft Solar Sailer that is propelled by light beams in the sky. They steal it in order to cross the Sea of Simulation to reach and destroy the MCP (Master Control Program). In the game you are equipped with a code to use against the MCP but to reach it you have to negotiate a hazardous journey first of all. If you're going to buy a *Tron* game, then get this one.
Value 3, Graphics 3, Sound 3, Gameplay 2 □

The big attraction at arcades these days seem to be the new laser-disc games such as *Dragon's Lair* and *Astron Belt*. The traditional type of video game is still going strong, however, and if you should find yourself getting tired of the laser-discs, here are three of the latest computer-generated games which you can expect to find in your local arcade:

UPN DOWN by SEGA

Here's a driving game with a difference, and in some ways it's a lot more entertaining than the straightforward racing games which are so popular at the moment. Great fun though they are, driving round the same course over and over again can get a little tedious.

In *Upn Down* the track is constantly changing: one minute you're speeding across open country, the next you're negotiating elevated sections, step ramps or one of the frequent, complicated cross-over sections. The player's car – a souped-up Volkswagen beetle by the looks of it – is controlled by a familiar, 8-way joystick control which determines directions and speed and, believe it or not, a "jump" button.



Push the joystick to start and the road unfolds before you. At the top of the screen you will see a line of coloured flags. The first object of the game is to collect all the various coloured flags placed along the road. Each is worth 200 points. If you should take a wrong turning and miss one, don't worry, there are plenty of them. If you manage to collect them all in under 1 minute you score substantial bonus points.

As well as the flags, you can collect balloons, ice-cream cones, hats and fruit which all lie scattered along the road and are worth 800 points each. While you are out collecting these items, enemy cars are constantly threatening. If you should touch an enemy, you will be destroyed. However, if you can jump your car and land on the enemy he will be destroyed and you will earn 400 points. You will also meet bonus cars which are worth 1000 points if jumped on, but again, be sure that they don't touch your car.

Parts of the track are shaded differently from the rest. White indicates a downhill slope and dark grey is uphill. You may find some slopes that are just too steep to drive up without a running start. Be especially watchful for brown sections of the road. Hit these and the next time you come to them they'll have disappeared and you'll need to make a dramatic jump. In fact, jumping is the secret to success in this game. Not only can you destroy enemy cars by jumping on them, you can also switch tracks to avoid pursuers, although if you land off the course you will lose your car. One last warning: watch out for the destruction cars. Just when you least expect them, they appear from in front or behind, bearing down on you at high speed. They cannot be destroyed – the only defence against them is to jump them. You have been warned.

Upn Down is a highly entertaining game and with the constantly changing scenes, boredom is never a problem. Graphics are excellent, bright and sharp, but there is one niggle – the sound effects. The same few notes play continuously throughout the game and after a while it can become very irritating indeed. No game is perfect, though, and I don't think that this minor complaint is enough to stop me spending a lot of time on what is otherwise an excellent game.

TRACK & FIELD by CENTURI

Track and Field is currently one of the most popular arcade games in America, giving even the laser-disc games a very good run for their money. Although at first sight it looks pretty much like any other conventional video game, there are some features of *Track and Field* that make it just about unique. For a start, the player needs to use a variety of skills to compete successfully co-ordination, reflexes and sheer physical strength all play a part in the various events. Another unusual aspect of the game is that from 1 to 4 players can compete at one time – this tends to generate a lot more excitement than the more usual 2-player games. If only one person is playing, the computer provides an opponent in the running events.

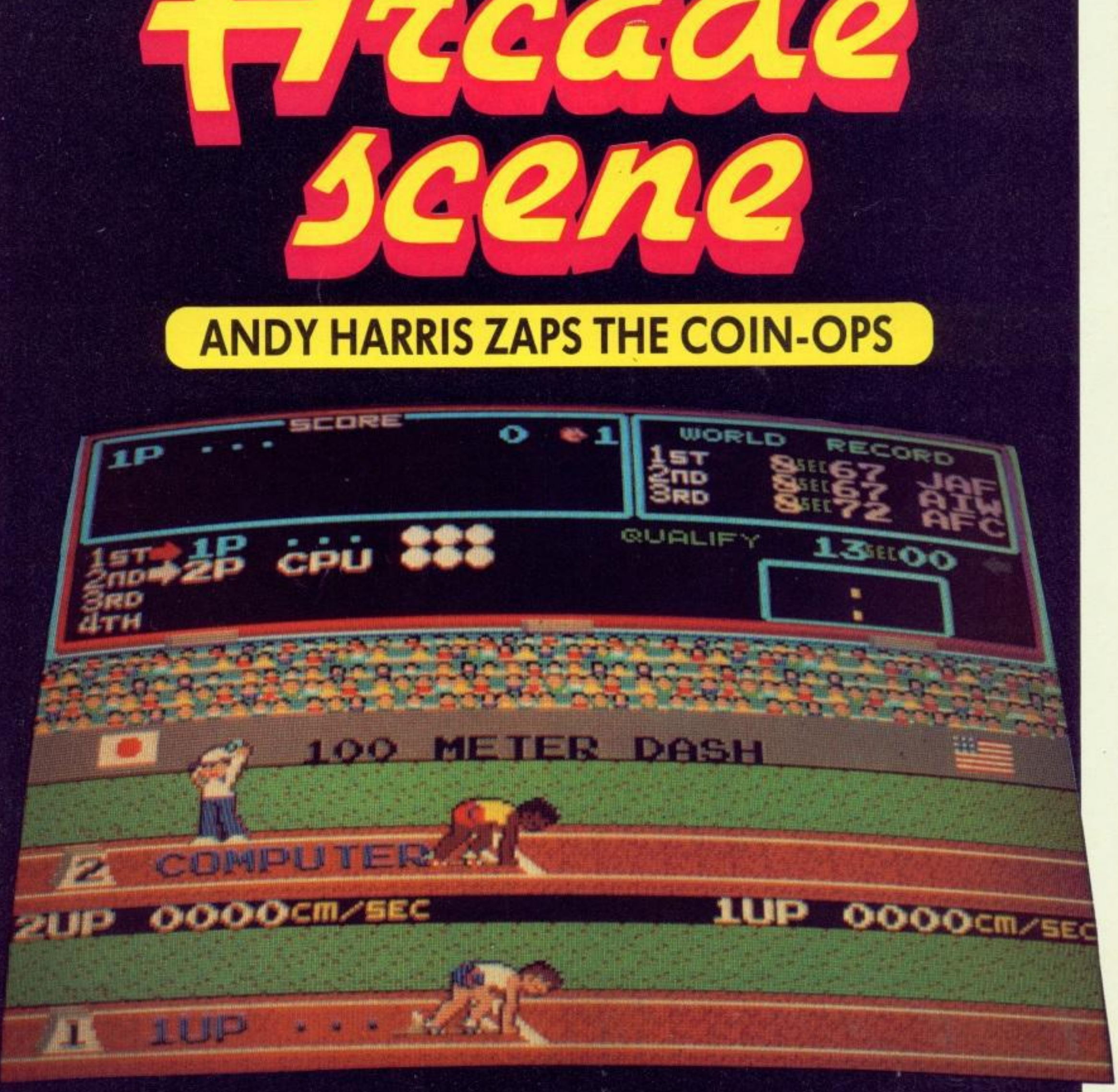
Each player can enter six events: 100 meter sprint, long jump, javelin, 110 meter hurdles, hammer throw and high jump. In each event the player has to qualify against a predetermined time or distance in order to proceed to the next event. If he fails to qualify, the game ends.

Controls are simple, with one button controlling running and another for jumping and throwing.

Before starting, each player enters his initials which then appear on the scoreboard above the crowded spectator stand. The first event is the 100 meter sprint. Making sure not to jump the starting gun – you

The Arcade scene

ANDY HARRIS ZAPS THE COIN-OPS



use only the running button, tapping it repeatedly as fast as you can. A two-fingered action seems to work best for most people and you should not have any trouble beating the qualifying time and moving on to the next event, the long jump.

This is where your powers of co-ordination will come into play. To make your jump, you must first gain speed on the approach by using the run button and then, before you hit the foul line hit the jump button. Depending on how long you keep the button pressed, you will leave the ground at a certain angle and this angle determines how far you travel through the air. You get three attempts here and if you qualify, it's on to the javelin.

The same skills are used here as in the long jump. Pound down the track and then, at precisely the right moment, hit the throw button. You'll need to keep it pressed for slightly longer than before to achieve the necessary height and angle which

The Arcade scene

Continued from page 17

will see you through to the next event: more running but this time over hurdles.

You only get one shot at the 110 metre hurdles – a real test of stamina and reflexes. Knocking down hurdles will seriously reduce your chances of qualifying. But if you do manage to achieve the necessary combination of running and jumping, you will find yourself moving onto the inner field in preparation for the hammer-throwing event.

You get a bird's eye view of this part of the competition, looking down first on the hammer thrower in his circle and then, when the hammer has been thrown, of the whole field. To start the action, press the run button. If you should lob the hammer into the crowd or move out of the throwing circle, don't worry – you get three attempts to qualify.

The final event in the games is the high jump. One touch of the run button will start you off, and at the critical moment you must press jump to get yourself over the bar. This is probably the hardest event of all but again, three attempts are allowed and if you make a good jump you could be in line for a new world record for the games taken overall.

Track and Field is undoubtedly a classic video game. The games themselves are exciting, entertaining and constantly challenging. The attention to detail is superb. In the running events, for example, the winner waves his arms above his head in response to the applause of the spectators while the loser stands on the track scratching his head. The scoreboard is very well designed and easy to understand, even if it does contain a glaring spelling mistake. Graphics and sound are both excellent, with times and distances spoken as well as displayed on the scoreborad.

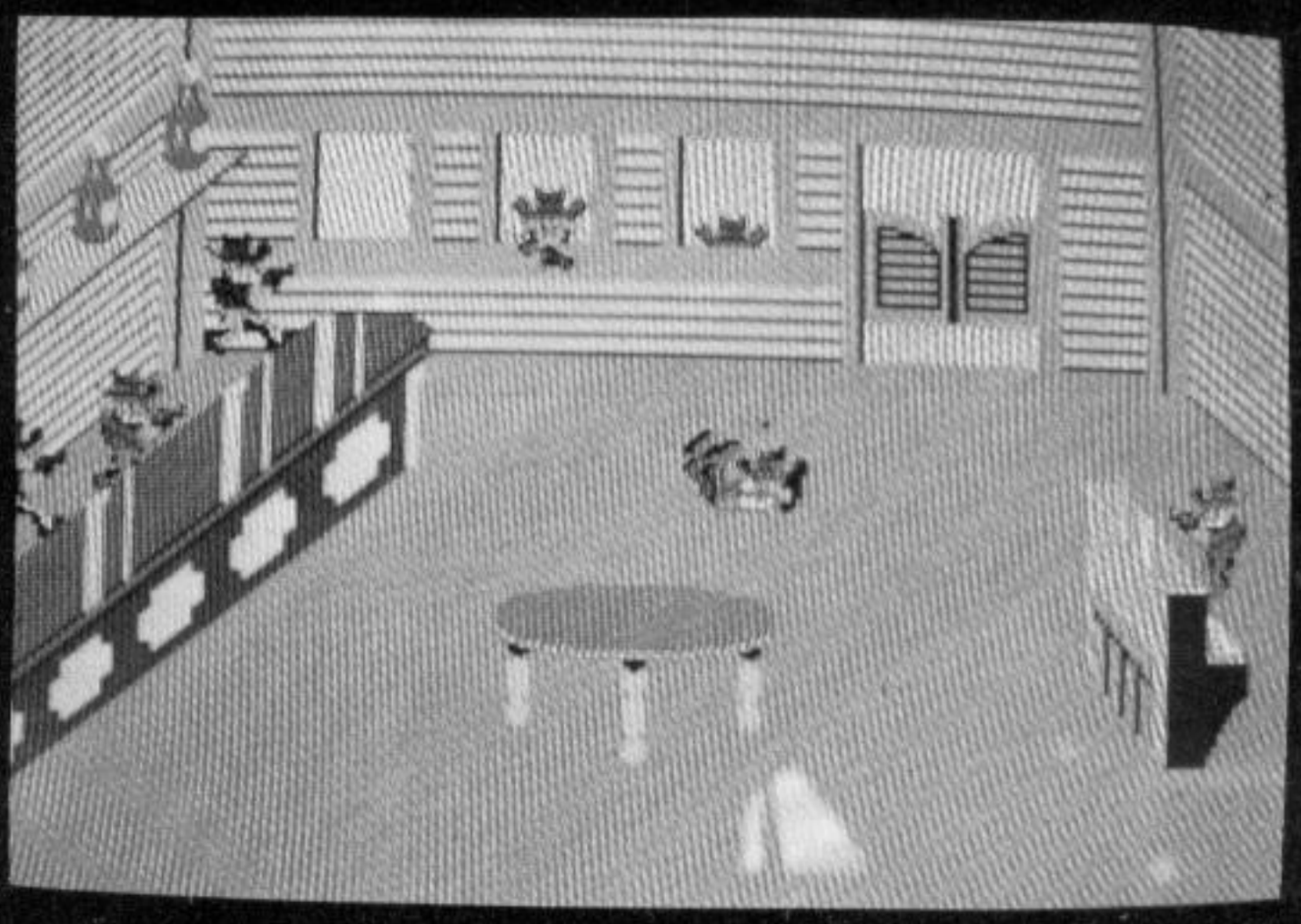
If you do manage to complete all the events successfully, you will not go unrewarded. Not only will you initials be recorded in the hall of fame but you will also find yourself mounting the winners' rostrum where you will be treated to a kiss by a shapely blonde. To add even more to the effect, the theme tune from *Chariots of Fire* is played.

With this being Olympic year, *Track and Field* has appeared at just the right time and it should be in your local arcade now: "On your marks... get set... GO!".

TIN STAR by TAITO

Like western films, video games with a westen theme have been a little thin on the ground lately and Taito obviously think that the time is right to bring back sagebrush, saloons and six-shooters.

Tin Star begins in the classic manner, with you as the Sheriff riding into town on a fine looking horse. Having dismounted, it's your job to clear the town of varmints who are hiding in windows, behind doors and on roofs. The Sheriff is controlled by means of a 4-position joystick and his gun is aimed and fired using a rotating knob. There is also a "jump" button which can be used from time to time. Fortunately, the bullets fired by the baddies travel so slowly that you shouldn't have much trouble dodging them, but if you do get hit you have three lives before the game ends. In the first scene, out on the street, watch out for rolling barrels (you can jump over them) and also for dead outlaws falling from roof-tops. If you do survive the street battle, you will find yourself entering the saloon where yet more baddies await with guns drawn.



In this scene you can double your points by jumping on a table and firing from there, although this is a very risky move, making you an easy target. There are some nice touches in the saloon such as the bottles behind the bar which break if hit. At the end of the scene, beware! Just when you least expect it, a sole survivor can appear from the bottom of the screen and he seems to have no qualms about shooting people in the back.

From the saloon you move on to the stables. Here you will find your opponents lurking in the hay lofts as well as all around you on the ground. A good strategy here is to get rid of the outlaws in the hayloft and then get up there yourself to continue the battle. You will see an oil lamp hanging above the door: try and shoot it down onto an outlaw's head for bonus points.

Between the saloon bar and the stables you are given the opportunity to collect further bonus points by shooting a varmint as he gallops past at high speed.

This is a simple and straightforward game but nonetheless enjoyable for that. And, whilst it's far from being a dramatic breakthrough in arcade games, it certainly makes a pleasant change to fight your opponents using an old-fashioned 6-shooter rather than the laser blasters and neutron mines that are found on so many of today's arcade games. □

TOP SCORE

TV Gamer has compiled a list of top scores and UK records

Game	Game No. (other than 1)	Score	Source	Record holder
Asteroids		77,022,030	(Atari)	
Astrosmash (Aquarius)		300,250	(TVG claimed)	Olwen Jones
Barnstorming		27.80	(TVG claimed)	B A Thompson
Barnstorming	(2)	49.98	(Activision)	B A Thompson
Barnstorming	(3)	52.52	(Activision)	B A Thompson
Berzerk		20,785,450	(Atari)	
Centipede		323,512	(Atari)	Stuart Murray
Chopper Command		10,000	(TVG claimed)	David Harvey
Chuckie Egg (BBC)		250,000	(TVG claimed)	Roy Sturgess
Circus Atari		72,745	(TVG claimed)	David Harvey
Decathlon		10,078	(Activision)	Mark Riley
Defender (VCS)		53,032	(Atari)	
Defender (HCS)		10,000,000	(TVG claimed)	David Harvey
Dragster		5.6 secs	(Activision)	Alan Carter
Donkey Kong (CBS)		1,334,400	(TVG claimed)	Allan Thompson
Donkey Kong Jr		2,035,200	(TVG claimed)	Dane Clarke
Enduro		10 days driving	(Activision)	Gordon Hamilton
ET		3,102,612	(Atari)	
Freeway	(3)	36	(Activision)	Steven Brown
Galaxian (HCS)		60,000	(TVG claimed)	David Harvey
Grand Prix		0:29.61	(Activision)	Ray Watkinson
Grand Prix		0:29.61	(Activision)	David Ross
Grand Prix	(4)	1:35.38*	(Activision)	Ray Watkinson
Happy Trails		550,566	(Activision)	Andrew Thompson
Minestorm		5,500,000	(Vectrex)	Mr Warren
Missile Command (VCS)		72,632,845	(Atari)	
Missile Command (HCS)		120,000	(TVG claimed)	David Harvey
Mousetrap (CBS)		1,280,000	(TVG claimed)	Allan Thompson
Munchkin (G7000)		560	(TVG claimed)	Paul Sanders
Oink		62,048	(Activision)	B A Thompson
Pac-Man (VCS)	(3B)	6,128,619	(Atari)	
Plaque Attack		77,745	(Activision)	David Ross
Pole Position (HCS)		128,000	(TVG claimed)	David Harvey
Popeye (VCS)		71,000	(TVG claimed)	Adrian King
Q*Bert (HCS)		68,000	(TVG claimed)	David Harvey
Qix (HCS)		97,000	(TVG claimed)	David Harvey
Robot Tank		64 tanks	(Activision)	B A Thompson
Sea Quest		484,770	(Activision)	David Ross
Skiing		27.36 secs	(Activision)	Marc Castle
Space Armada		139,120	(TVG claimed)	David Bond
Space Invaders (VCS)		5,300,005	(Atari)	
Space Spartans		194,130	(TVG claimed)	David Bond
Spider Fighter		900,00	(Activision)	Mark Dawson
Stampede		35,164	(Activision)	Sai Ming Wong
Super Cobra (HCS)		100,000	(TVG claimed)	David Harvey
Superman		23 secs	(Atari)	
Tron Deady Discs		23,390,750	(TVG claimed)	David Bond
Turbo (CBS Coleco)		1,000,000	(TVG claimed)	Dane Clarke
Video Pinball (VCS)		222,494,331	(Atari)	
Yar's Revenge		8,000,000	(Atari)	
Yar's Revenge	(6)	2,265,487	(Atari)	

**** UK and World record***

TV Gamer invites readers to send in their high scores for any screen game. A ***claimed*** score merely needs to state your name, game title, system (eg Atari Home Computer System, Spectrum, VCS etc) and claimed score.

A ***proven*** score will require photographic evidence, but will take precedence over previous claimed scores. We suggest using a SLR auto-exposure camera on a tripod with cable release, timed at 1/4 second. Games which can be "clocked" (ie the score reaches a maximum and then returns to zero) will only count as claimed scores. Additionally, games which present short-cuts to high scoring (eg *Space Invaders*, which can be made to shoot two missiles at a time) will also only be accepted as claimed scores.

Send your scores to *TV Gamer, Top Score Desk, 187 Oxford Street, London W1.*

DOUBLE PRIZE-QUIZ

SHARP QUIZ

To enter this quiz, firstly read in this issue of TV Gamer the article about the new Sharp MZ-700 series computers and the list of games available for the system. Then you should be able to answer the Sharp Quiz questions. Write the numbers of the page and the column where the answer to each question is to be found on the cut-out form. For instance, if you think the answer to question 1 is to be found on page 25, column 3, then put 25/3 in the space under box 1.

Then complete the tie-breaker sentence in no more than 25 extra words, sending the completed form to May quizzes, TV Gamer, 187 Oxford Street, London W1R 1AJ.

THE QUESTIONS

1 Where you can get a King of Gold from one.

2 Where using your Sharp could lead to a nice adventure.

3 Where you might find a Sharp oeuf.

4 Where 26K of BASIC isn't as bad as it seems.

5 Where Sir provides nuclear fission.

This month's Sharp Quiz prize will be:

* A Sharp MZ-711 home computer
* The winner's choice of any three cassette games from the games listed in the article on the Sharp MZ-700 computers.

RULES FOR THE QUIZZES

1. All entries received by the closing date, 31st May, 1984 will be examined and will be judged by the Editor.

2. Entries will be accepted for either quiz or both. In the event of a tie, the winner of the Sharp quiz will be adjudged to be the contestant who completes the most apt tie-breaker line.

In the unlikely event of a tie in the Word Game Quiz, the winner's entry will be adjudged to be that which contains the greatest total number of letters used in the Quiz. If the entries are still tied the winner's name will be drawn by lot.

3. Prizewinners will be advised by post, and details will be published in a forthcoming issue of *TV Gamer*.

4. All entries must be made on forms cut from *TV Gamer*, and photocopies are not acceptable.

5. All prizes are to UK standards, and servicing cannot be guaranteed overseas.

6. The Editor's decision is final.

WORD GAME

How many words can you make from the words "Texas Instruments"? Quite a lot, probably! So, we're going to help you to cut down on writing by asking for five-letter words or longer.

The contestant who writes the greatest number of words wins. English words only may be used except: plurals, proper names, hyphenated words or abbreviated words. Letters may only be repeated in a word as often as they appear in the words "Texas Instruments".

This month's TI Word Game Quiz prize will be:

* A new TI-99/4A home computer
* The winner's choice of any two Atarisoft cartridges from Britain's only TI-99/4A Atarisoft supplier, Parco Electronics. There are five Atarisoft cartridges to choose from: Paranoia, Protector II, Defender, Pac-Man and Donkey Kong

ENTRY FORM

SHARP QUIZ

Page and column numbers corresponding to the questions are as follows:

QUESTION NUMBER	1	2	3	4	5
PAGE/COL. NUMBERS					

"I think the most interesting feature of the sharp MZ-700 Series computers is .....

.....

because .....

WORD GAME QUIZ

I have found .... words in Texas Instruments. I enclose my list of words.

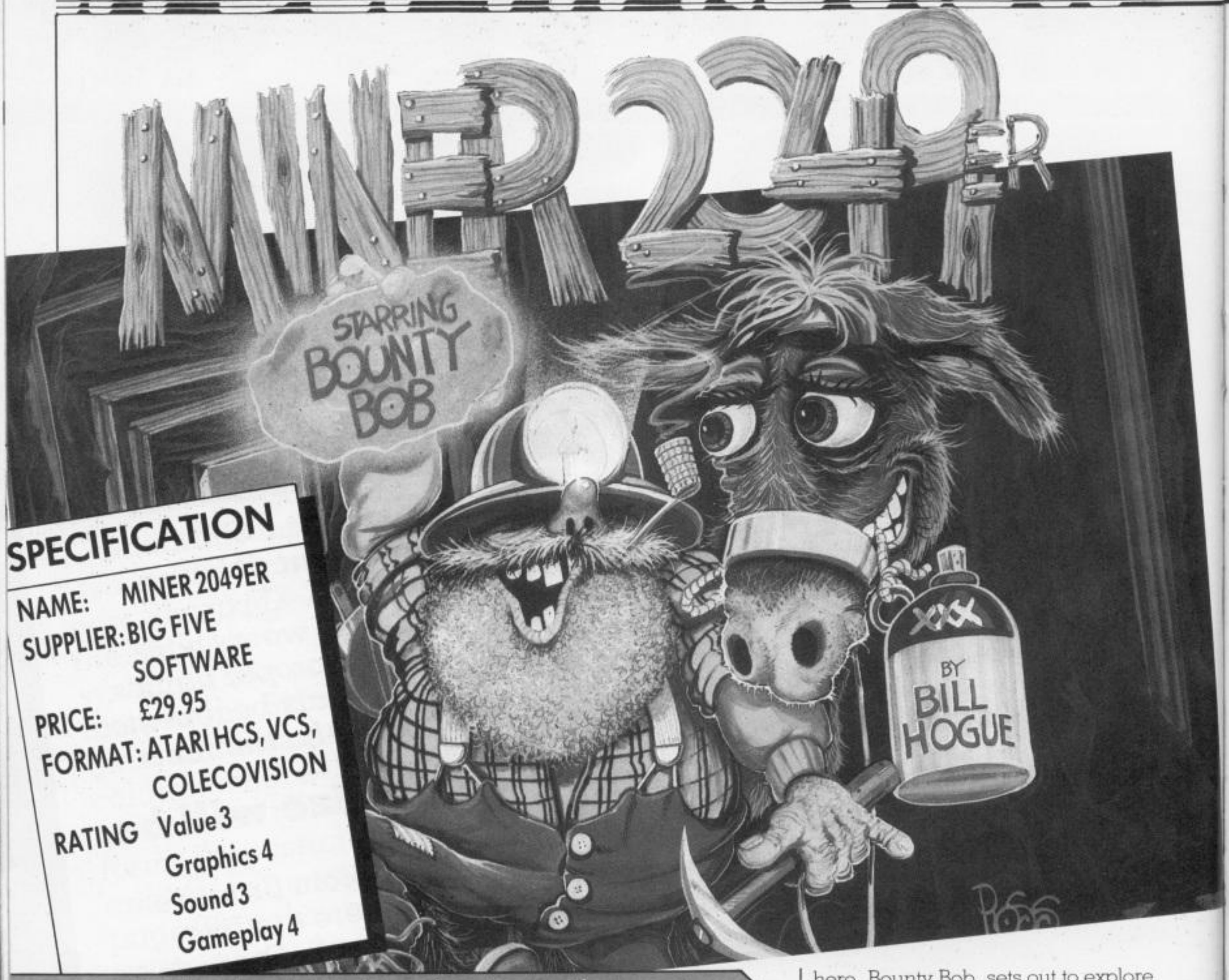
Name .....

Address .....

.....

To May Quizzes, TV Gamer, 187 Oxford Street, London W1R 1AJ

MINER 2049ER



SPECIFICATION

NAME: MINER 2049ER
SUPPLIER: BIG FIVE SOFTWARE
PRICE: £29.95
FORMAT: ATARI HCS, VCS, COLECOVISION
RATING Value 3
Graphics 4
Sound 3
Gameplay 4

Dave Bishop has been down the mines with Big Software's craziest game.

A large number of people spend a lot of time searching for the definitive computer game formula. But the simple truth is that everyone has their own idea of what makes a good game a great one.

However, although everybody's recipe for success may differ, there are certain ingredients, such as multiple-screen action and a certain logical approach, which crop up with significant regularity in many of today's bestsellers.

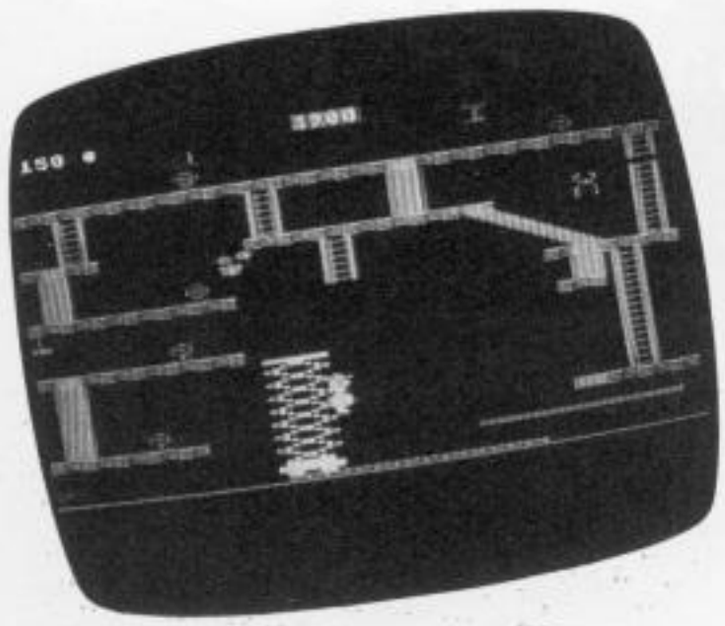
The majority of good games employ the learning curve principle – a gamer should find a game playable from the outset, but only just; too difficult or too easy and interest wanders. Games with a well-thought-out curve are those that lure the player into a false sense of security where he believes that he has finally "cracked it" only to be confounded by some new and seemingly impassable obstacle requiring new skills. Games with such critical curves have the effect of drawing the player back for more.

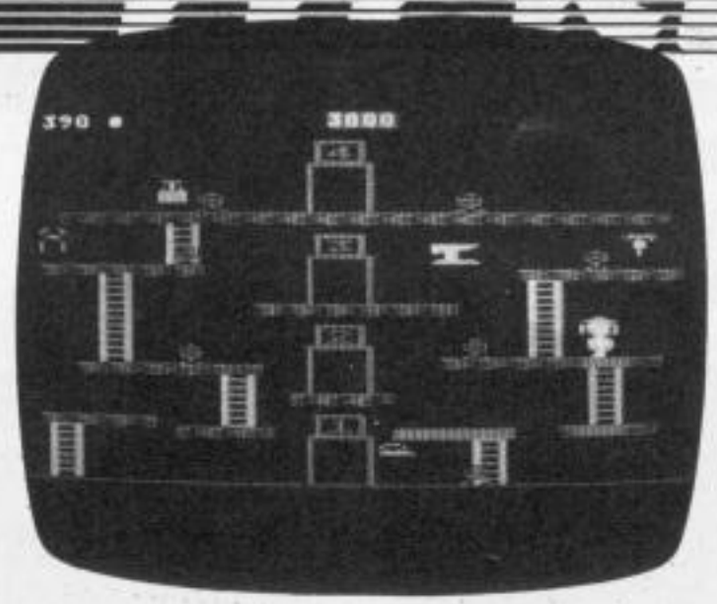
It comes as no surprise then, that a game embodying most, if not all, of the pre-requisites for a software mega-hit has just reached "platinum" status, based on international sales. Addictive is not a strong enough word to describe this game; it should be on the restricted drugs list because it poses a serious risk to most gamers' health.

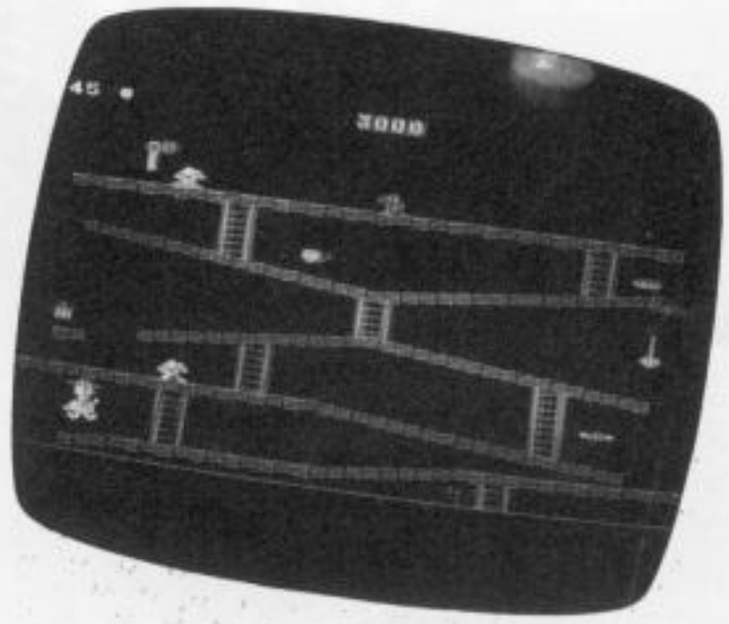
The game in question has the unlikely title of *Miner 2049er*. Our hero, Bounty Bob, sets out to explore a series of mines (once owned by Nuclear Ned) in search of Yukon Yokan, a ruthless and conniving Swedish fur trapper. The ten levels in Nuclear Ned's mine, each more fiendish than the last, require new and more finely-tuned skills to be mastered before the ground in that particular segment of the mine can be covered. Only then can Bob progress to the next section.

In each screen, Bob must cover all the ground of the mine, which changes colour as he walks over it. This must be achieved in as fast a time as possible, otherwise oxygen supplies run out and Bob turns blue in the face as he tragically expires. Any time remaining on completion of a screen is added to the score.

Survival in Nuclear Ned's old mine is further complicated by Mutants – deadly organisms that roam around in the depths zapping







Today's intrepid miner has many hurdles to overcome on his way through the different subterranean adventures in Miner 2049er.

inexperienced explorers. Contact with these dastardly multi-coloured monsters results in a painful and terminal death situation.

There is, however, one way of getting the better of the Mutants. Scattered throughout the mine are a Plethora of articles abandoned or lost by previous miners. If Bob claims these articles by passing through them, the Mutants change temporarily into friendly green fellows that should be eaten before they turn back to their normal evil selves. Although some parts of the mine can be navigated by simply avoiding or jumping over the Mutants, the ground in most screens is too well-protected by the little fellows. As there are only a limited number of objects to claim in each screen it is important that the time when the Mutants get their come-uppance is put to good use.

Play strategy - Hints and revelations

Let's have a more detailed look at each of the levels, or stations as they are called, in order to illustrate some of the subtleties of design in Bill Hogue's masterpiece.

STATION 1 · THE MINE SHAFT

As with any well-thought-out game, *Miner* has a limbering up screen. Here the player familiarises him or herself with Bob's movements under joystick control. Pass Bob through one of the six articles in this station and observe what happens to the Mutants. It is useful to know just how long they are green and friendly even at this stage, because this "Mutant grave period" becomes of critical importance in later stations. Try running towards one of the Mutants and jumping over its head. You may kill off Bob with sad regularity to begin with but soon your timing should improve and jumping will become second nature. Your ability to judge just how far Bob can jump will be tested, as one part of this screen can only by reached in this way.

Upon closer examination, the Mutants are seen to follow a regular to-and-fro, guard-dog pattern. This predictability of movement is vital in planning your strategy for each of the stations. Equally important is the path you take through any particular station. One of the beauties of *Miner* is that each level can be tackled in numerous different ways, but always a single optimum route through each station has Bob progressing to the next. Time is of the essence – the quicker all the ground in any station is covered, the more bonus points are awarded. So try and avoid covering the same ground twice and always be on the lookout for dead ends – these should be covered last.

In Station 1 there are four Mutants to gobble. It may not always be prudent, however, to adopt a totally malicious attitude to these creatures because the time wasted in pursuit may lose you more bonus points than those you gain in catching your prey. With this in mind, try completing this screen, either by killing all the Mutants or by ignoring the Mutant on the bottom of the station. When you can regularly score over 4000 points in Station 1, tackle Station 2.

STATION 2 · THE SLIDES

All your concentration can now be turned to the dastardly slides that can thwart even your best efforts. Put one foot wrong and zoom! Bob will slide unceremoniously to the very bottom of the station. Certain facts about Station 2 will very soon become apparent:

* Certain pieces of ground should be left uncovered until the end.

* Those parts of the ground across the top of the slides can be covered if you are careful.

* Head-butting a mutant can be fatal.

Let us expand on these facts. It's a good policy to legislate for later failures by eating the two nasties at the bottom of the station. This saves the embarrassment of sliding down directly onto one of them. Closer examination of the station will reveal that some parts of the ground contained in the slides can be stepped on with impunity but this is not necessary with the right-hand slide, as you will see. This slide contains a block of two which can only be reached one way.... This block also houses a Mutant which obviously must be eaten before the station is cleared. The stone jar of cider just below left is a clue to this puzzle.

MINER 2049er

STATION 3 · THE TRANSPORTERS

Once you get the hang of this one, it's really quite easy. The speed at which you can use the keyboard is important, but the most useful skill acquired here is learning just what height Bob can jump down from without damaging himself.

STATION 4 · THE LILYPADS

This is one of the cleverest station designs to be found in *Miner* and requires accurate joystick control. Use of the "Esc" button, which freezes the action giving you time to survey the scene and plan your route, can be made here. The key is speed in jumping from pad to pad. However, this assumes you are following the correct route. Many hours of playing were required before we found the optimum route but we don't intend to make it too easy for you, so here are just a few clues:

- Don't climb the dead-end ladder at the beginning.
- The dollar bill and a little patience gives the chance to gobble three Mutants.
- The isolated pair of blocks in the middle can only be approached from one side.

You should eventually be able to complete Station 4 with 2900 remaining on the Miner Timer as bonus score.

STATION 5 · THE ADVANCED LILYPADS

The key to Station 5 is mastering the complex array of slides at the top. Suss these out and you're halfway there. There are various red herrings in this screen, such as an attractive looking multi-coloured Martini, which has an effect far worse than even a Pan-Galactic Gargle Blaster! Other bits worth leaving alone are the moving platforms, and the candelabra which, although scoring 500 points is a very risky option that also results in some of your path having to be retraced. A score of 1400 left on the Miner Timer is respectable here.

STATION 6 · THE NUCLEAR WASTES

Not a station for the weak of heart – with the threat of radioactive rubbish constantly bubbling below. This screen requires accurate jumping onto blocks of ground and the moving platforms, both of which are essential to completion. Beware also of the cul-de-sac in Station 6 from which there is no going back.

STATION 7 · THE ADVANCED TRANSPORTERS

This station has the lifts, the slides and the moving platforms from previous stations and there are two or three really tricky spots that are worthy of mention:

- The top right-hand platform can be negotiated if you follow strictly the set of rules which became apparent when the slides first appeared.
- Probably the most difficult Mutant to gobble in the whole game patrols the centre top platform. There is one way of defeating it. This nasty was nearly the cause of our sweaty towel being thrown in, but suddenly the answer came from a totally unexpected quarter.
- One final thing to be wary of here is the position in which you place Bob when using the lifts. This is crucial when transporting to level 4.

STATION 8 · THE LIFT

A combination of excellent graphics and sound effects makes this one of our all-round favourites in Nuclear Ned's mine – a real thinking person's station, which you will play at least fifty times before getting it right. Quick control of the crane, which need only be used four times, is essential. You'll feel a real sense of achievement when you've cracked this one.

STATION 9 · THE PULVERISERS

This station is surprisingly one of the easiest to crack and really belongs much earlier in the game. Anyone who has negotiated the first eight stations should be able to romp through this one with no trouble at all. The critical bits are timing your jumps from the moving platforms and predicting the movement of the pulverisers, which should really be more difficult to negotiate to be worthy of Station 9.

STATION 10 · THE CANNON

A lovely station on which to complete the first zone (there are only 255 more!). Although the instructions state that none of the Mutants can be eaten in this station, there is in fact one that is vulnerable.... This helps a little but the real problem you will have to tackle is when to shoot Bob out of the cannon.

After Station 10 has been completed, it's back to the first screen again, but this time the exasperating Mutants are moving a bit faster....

This game has it all and there is still one more twist. A secret 10-digit code number will enable you to enter any of the 10 stations out of sequence and totally at will. What is this magic number? Well, all we'll say is that it's there....you just have to find it. Write in and tell us when you've cracked it.

NB. HORSES FOR COURSES

This article is based on the Atari Home Computer version of *Miner 2049er*, which was originally written for this machine, and some of the game-play is peculiar to this version only. However, there is much common ground between the Atari Home Computer and, say, the *Atari 2600* version (3 screens, incorporating slides, transporters and the cannon), or the Coleco version (11 screens, 8 from the original version plus 3 new ones).

A company by the name of Micro-Fun have just finished the conversion for CBS, who should be releasing it later this year. There are numerous other versions for other computer systems, each distributed by different companies, not all of which carry the same title, so keep your eyes peeled. □

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GAME INPUT
KEYBOARD - Full stroke, 48 keys
CASSETTE - Yes, conventional or TI's own. Special data lead is essential, and a bit tricky to get hold of.
CARTRIDGE - Yes, max. capacity 36K.
DISC - Yes, TI's own.
TELESOFTWARE COMPATIBLE - No

TECHNICAL INFO
MEMORY - 16K RAM (expandable to 48K), 26K RAM (including BASIC)
CPU - 9900 family, 16 bit
GRAPHICS - 192 x 256. 16 colours. Max text display 32 columns x 24 lines
SOUND - 3 channels, 5 octaves

Unbeknownst to mere mortals Texas Instruments decided to withdraw the TI 99/4A from the market some months ago, and many Christmas shoppers, attracted by the under-£100 price tag unwittingly helped the company to clear out its old stock. Today this computer is becoming quite difficult to buy and so we're aiming our review at new TI owners who may be thinking they've bought a naff system. Far from it, says Darrin Williamson, the TI 99/4A will soldier on. It is still an excellent first machine. We're offering readers one in our Double Prize Quiz on page 20.

TI 99/4A
Bargain or burden?

Texas Instruments launched this micro several years ago with a very high price tag. Since then, this potentially superb home computer has diminished in both price and popularity. Why? It's difficult to say for sure, but my theory is that gamers found it too expensive for a games machine, and businessmen saw it as too much of a "kiddy" computer. This was because the TI 99/4A was adopted as the micro used to teach primary school children the basics of computing in many American schools. With the aid of the computer language "LOGO" and "Turtle" graphics, very young children were able to draw quite complex TV pictures with relative simplicity.

Now, however, the TI 99/4A is priced at around £90–£100, which is extremely good value for money – or is it? Does the TI represent a bargain to the gamer or merely a burden?

Firstly, let's take a look at what you get for your money. The computer itself has 16K RAM and will accept ROM or tape software straight away, but a special tape recorder and lead are required (price £44.95). It will take joysticks but only the official TI type, unless you buy an adapter lead from Suncom which will allow you to use any standard Atari style joystick controller. The 48-key keyboard is full stroke and not thump-sensitive (thankfully), which makes it one of the cheapest micros around with a decent keyboard. The problem with the keyboard is that each key has several functions (Spectrum fashion). This will inevitably slow up a trained typist almost as much as a thump-sensitive keyboard!

The expansion possibilities are quite good, thanks to a large expansion box which houses such things as memory expansion cards, modems, disc drives etc. The mains transformer is a lot smaller than most and, wait for it folks, actually comes with a plug on the end (one of the few that do). It can be used with either a monitor or a conventional TV with the aid of a separate modulator. Both of these plug into the back of the micro so, theoretically, the computer and the software itself is multi-standard.

THE GAMES

TI have under their banner most of the classics, such as *Space Invaders*

and *Pac-Man* (in rip-off form), as well as some rather novel games of their own – like *Moonmine* (more about that later). The TI 99/4A is also one of the few micros to feature voice-synthesized games, thanks to the Voice Module (an optional extra), which plugs into the side of the machine. This gives certain games the ability to talk back in the same way as the Intellivision's Intellivoice module. Currently, there are three TI games that utilise the Voice Module. Nevertheless, all three games can be played without voice, since very little information is given in this way and it's displayed on-screen anyway. Generally speaking the more recent TI games are best. Some of the earlier games certainly lack the graphic quality that this system is capable of. However, there are some very good games around, such as *Parsec*, a sci-fi shoot 'em up (voice compatible), and *Moonmine* (voice compatible again), which is a 3D tunnel game in which you must zap nasties and collect earth treasures.

On the subject of treasures, the TI 99/4A doesn't have a bad selection of adventure-type games. They range from upgraded maze games such as *Escape from the Wumpus*, to the Scott Adams Adventures which have become so popular with owners of other computers.

The TI 99/4A really comes into its own with the combined cartridge/tape games, such as *Tunnels of Doom* – a graphic adventure game which kept the staff of *TVG* amused for hours. The cartridge holds all the parameters within the game – the factors which don't change – for example, the objects to be picked up and the foes you'll encounter. The tape just feeds in all the information that is different in each game, such as the contents and position of each room. This combination means that the

TI99/4A games available

This is a list of the games available for the TI99/4A. Games are listed by Manufacturer in the following order:

TITLE
TYPE OF GAME
- A Adventure
- AB Fully graphic adventure
- AT Mainly text adventure
- C Combat
- CL Climbing
- D Driving
- M Maze
- SF Sci-fi
- SIM Simulation
- SK Skill
- SP Sport

PRICE
Recommended, or usual retail price.
*Approximate price

Apex	
Boober	£ 4.95
Chalice	£ 4.95
Forbidden City	£ 4.95
Haunted House	£ 4.95
Pilot	£ 5.95
Snake	£ 4.95
Sorcerer's Castle	£ 4.95
TI Trek	£ 5.95
Atarisoft	
Centipede	£19.99
Defender (SF)	£19.99
Dig Dug (SK)	£24.99
Donkey Kong (CL)	£24.99
Pac Man (M)	£19.99
Picnic Paranoia (SK)	£19.99
Protector II (SF)	£19.99
Robotron 2084	£19.99
Stargate	£19.99
Cosmi	
Slinky	£14.00
Creative Software	
Ambulance (SK)	£32.40
Crisis Mountain (A)	£29.00
Driving Demon (D)	£32.40
Henhouse (SK)	£32.40
Pipes (SK)	£29.00
Rabbit Trail (SK)	£32.40
Schnozola (SK)	£29.00
St Nick (SK)	£29.00
Data Force	
Kippy's Nightmare	£7.95
Extended Software	
Bouncer	£7.95
Kong	£7.95
Diablo	£8.95
Games Pack 3 (Kong, Bouncer, Romeo)	£14.95
Fantasia 99	
ABM Control/Froglet	£5.95
FFF Software	
FFF Asteroids	£12.00
Shuttle Command	£12.00
Intersoft	
Defend the Cities 1	£14.00
Defend the Cities 2	£14.00
Galactic Gunfight	£10.00
Meteor Storm	£10.00
Intrigue Software	
Adventuremania	£5.95
Mania	£5.95
Transylvania	£5.95
Kuhl Software	
Data Rescue	£7.00
Fish	£6.50
Sceptre of Kzirgla	£9.00
Lantern	
Battlestar Attack	£6.95
Black Tower	£5.95
Blasteroids	£5.95
Bombs Away	£5.95
Builder/Minefield	£4.95
Character Generator	£4.95
Daddies Hot Rod	£5.95
Hop It	£6.95
Hunchback Havoc	£5.95
Operation Moon	£6.95
Pearl Diver	£5.95
Runner on Treiton	£5.95
Scrolmaster	£6.95
Torpedo Alley/Ascot Stakes	£5.95
Troll King	£5.95
Lizard	
Arena 3	5.95
Pinball/Cubits	£5.95
Torment	£5.95
Maple Leaf	
Devil Craze	£13.00
Hang-Glider Pilot	£13.00
Happy Math	£10.00
Sky Diver	£13.00
Mikro-Gen	
Mines of Saturn/ Return to Earth (SF)	£5.95

TI 99/4A
Bargain or burden?

adventure games have great potential (for a 16K machine). Atarisoft are also producing games for this system, which on the whole are as good as the Atari HCS games. These include *Pac-Man*, *Donkey Kong* and *Defender*.

The TI 99/4A looks as though it still has a reasonable future ahead of it, since neither the software houses nor the owners clubs have left it for dead. (There are two "official" clubs – the addresses are given below.) After-sales service should be continuing as well. A Texas Instruments spokesman assures us "there will be a warranty service for years to come". And since there are between 100,000 and 150,000 machines in use, it would be unwise for the software people to axe their range of games for this machine. So it looks as though there's life in the TI 99/4A yet! □

OWNERS CLUB ADDRESSES

TI Home Computer Users Club, PO Box 190, Maidenhead, Berks SL6 1YX. (£5 annual membership)

TI User Group, 40 Bar Hill, Hatcham, Brighton BN1 8UF.

Millers Graphics
Battle over Titan	£ 7.95
The Crazy Fun House	£ 7.95
Blackbeards Treasure	£ 7.95

Norton
Attack Man	£13.00
Cross Country Car Rally	£13.00
Lunar Lander	£10.00
Music Synthesiser	£13.00
Star Trek	£10.00
Super Frogger	£13.00

Not-Polyoptics
Advance (C)	£7.95
Ant Wars (SF)	£7.95
Cars & Carcasses (SK)	£7.95
Crosses (SK)	£7.95
Khe Sanh (War in Vietnam) (C)	£7.95
Lasertank (ex BAS) (C)	£7.95
Maze of Ariel (A)	£7.95
Sengoku (Japenese Warfare) (C)	£7.95
Ships ! (Battle on the Sea) (C)	£7.95
Starship Pegasus (SF)	£7.95
Tickworld (Sk)	£7.95
Treasure Trap (A)	£7.95
Waldoball (SK)	£7.95
Winging it (SIM)	£7.95
99 'Vaders (SF)	£7.95

Pewterware
Bluegrass Sweepstake	£7.00
Challenge Poker	£7.00
Decathlon	£7.00
Goblin's Revenge	£7.00
Match Wits	£7.00
Up Periscope	£7.00

P S Software
Crazy Caver	£ 7.00
PS Pesteroids	£11.00
Space Rescue 2.0	£11.00
Wonkapillar	£ 7.00

Roach Software
Mega Fighter	£11.00
Outland	£10.00

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Invasion	£5.00
Kong	£5.00
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Man & Monsters	£6.00
Night Flight	£6.00
The Pit	£6.00
Planet Destroyer	£6.00
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T.N.T.	£5.00
Trogman	£6.00
Zarquon	£6.00
3D Race	

Temptation Software
House of Bugs	
Tank Battle	
Special Mission	

Texas Instruments
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Alpiner (CL)	£
A-Maze-Ing (M)	£
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Hangman (SK)	£
Hunt The Wumpus (SK)	£
Hustle (SK)	£
Indoor Soccer (SP)	£
Mind Challengers (SK)	£
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Oldies but Goodies II (SK)	£
Othello (SK)	£
Parsec (SK)	£
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The Attack (C)	£
TI-Invaders (SF)	£
Tombstone City (A)	£
Tunnels of Doom (M)	£
Video Chess (SK)	£
Video Games 1 (SK)	£
Yahtzee (SK)	£

TI Imagination
Walls & Bridges	£13.00
Zombie Mambo (2 Progs)	£15.00

Thorn EMI
Computer War (SF)	£ ?
River Rescue (C)	£ ?
Submarine Commander (C)	£ ?

Tiger Electronics
Miner 2049er (CL)	£28.75
Springer (CL)	£28.75
Polaris (C)	£28.75

Titan
Gopher	£ 8.00

Virgin
Robopods (SF)	£6.95
Fun-Pac 1 (SK)	£6.95
Fun-Pac 2 (SK)	£6.95
Fun-Pac 3 (SK)	£6.95

Welcom Software
Othello	£6.95
Toad Graphics	£6.95
DIYad	

SHARP MZ-700

Sharp's new 700 series computers caught Darrin Williamson's eye at a show recently. Here's his assessment of the system. His conclusion? It's got great potential. We're offering readers one in our Double Prize Quiz on page 20.

GAME INPUT

KEYBOARD - Full stroke, 69 keys
CASSETTE - Yes, conventional or built in on 721 and 731
CARTRIDGE - No
DISC - Yes, official Sharp drives
TELESOFTWARE COMPATIBLE - No

TECHNICAL INFO

MEMORY - 64K RAM (38K usable after loading BASIC)
CPU - 280A Clock speed 3.5 Mhz
GRAPHICS - Max text display 40 columns x 24 lines.
SOUND - 1 Channel

Don't be surprised if you've never heard of the Sharp MZ-700 series. I hadn't until recently and I certainly didn't think that there were many games for it. However, as our list shows (see page 32) there's quite a selection floating around. So, it does seem like a good idea to take a look at this system which is relatively unknown in the games field. Could it be that there's a wonderful games machine that no one knows about?

Unfortunately not yet. Firstly, though, let us look at the machine itself. Sharp are to be commended for the appearance of this machine. It looks like a very professionally made piece of hardware. There are three models in the 700 range: the MZ-711, MZ-721 and the MZ-731. All these are internally the same, the only difference being the number of built-in peripherals each has. The 711 has a built-in tape device and the 731 has the tape drive as well as a pen-plot printer, which uses small biros to draw on ordinary paper (very good for graphs and charts but very slow when

Continued on page 50

SHARP MZ-700

Continued from page 31

MZ-700 GAMES AVAILABLE

KUMA SOFTWARE

Beginners' Chess	£ 9.95
Bug Zapper	£ 6.95
Castle Quest	£ 7.95
Competition	£ 9.95
Electron 22622	£ 6.95
Fun Pack (Superfire, Evasion, Gun, Zrinn, Towers of Hanoi, 3-D)	£ 6.95
Maze-Minder	£ 6.95
Music Composer	£ 9.95
Pakman/Millipede	£ 9.95
Quest	£ 6.95

KNIGHTS SOFTWARE

Bomb Run and Cosmic Invasion
Cribbage
Exploding Atoms
Galactic Invaders
Greedy Gremlins
Knight's Castle
Othello
Rescue Plane
Space Invaders
Wizard's Castle

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Alien Egg	£5.95
Alien Invasion	£5.95
Attack Force	£5.95
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Black Jack	£5.95
Bug Blaster	£5.95
Caesar's Invasion of Britain	£9.95
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Firefox	£5.95
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Ladders	£8.95
Mexican Adventure	£5.95
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Myriad	£5.95
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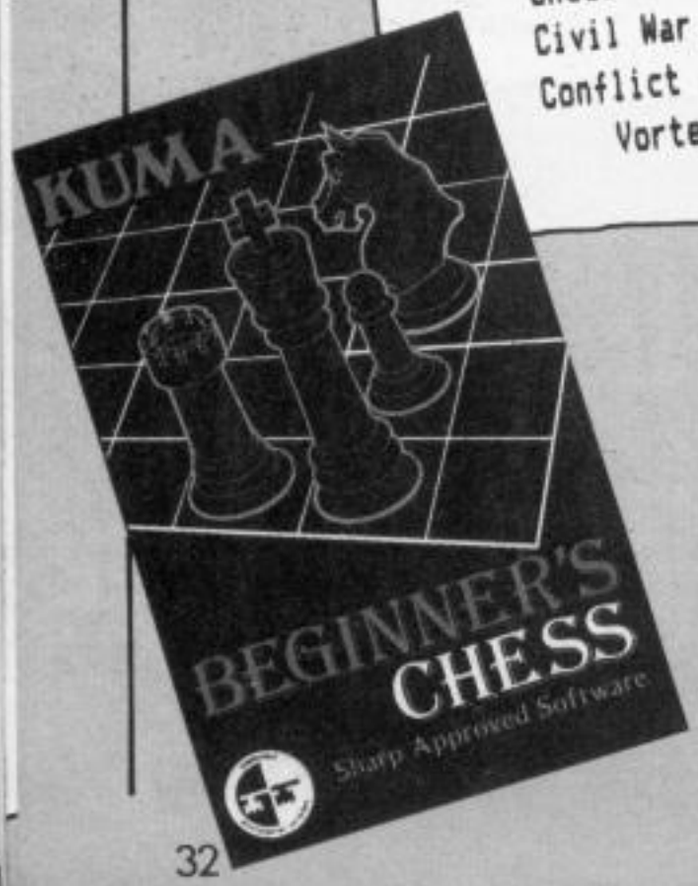
The Secret Kingdom	£5.95
World Cup	£3.95
Yahtzee	

SOLO SOFTWARE

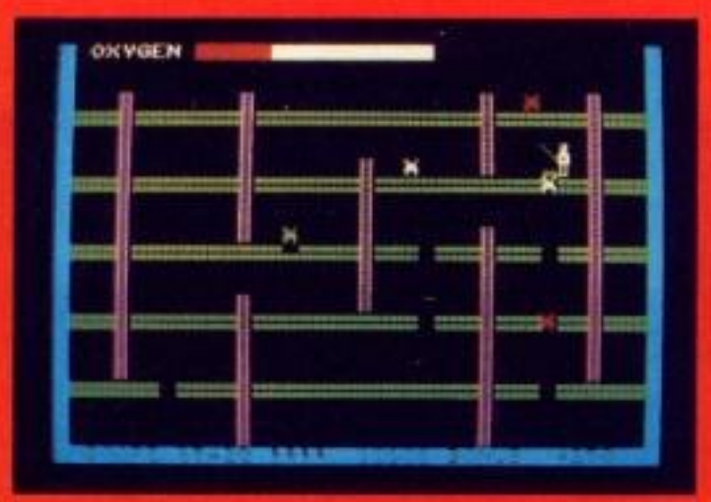
Ace Racer
Aladdin's Cave
Anthill Raider
Apocalypse
Attack-a-Tank
Bricky
Channel Tunnel
Chess
Chock-a-Block
Commando Plain
Comput-a-Slot
Conveyor
Domination
Dragon Caves
Encounter
Fighter Command
Fire!!
Fisherman Fred
Five-a-Side Soccer
Flame Quest
Frogger
Fun Pack
Game of Truth
Global War III
Golf
Gold Miner
Headache
Ice Warriors
Inca Gold
Kentucky Derby
Lazer Blazer
Lightning Patrol
Midas
Mountain Rescue
Multi-linguist
Nightmare Park
Para Shoot
Polaris
Rocket
SAS Attack
Safe-Cracker
Scoop
Snaker
Space Chase
Star Trek
Super Biorhythm
Super-Mouse
Three Card Brag
Tombs of Karnak
Tracker
Trucker
Up Yours



A SUPERB RANGE OF GAMES SOFTWARE FOR SHARP MZ-700 SERIES

FROGGER — £6.95

This most popular of arcade games has been totally recreated for the Sharp computer. Superb graphics and as fast as you like from beginner's level up to 'Super-human'. Get each of four frogs over the busy motorway, then hop from boat to raft to log to crocodile until safely home sitting on a lily pad. Terrific fun.



SPACE PANIC — £7.95

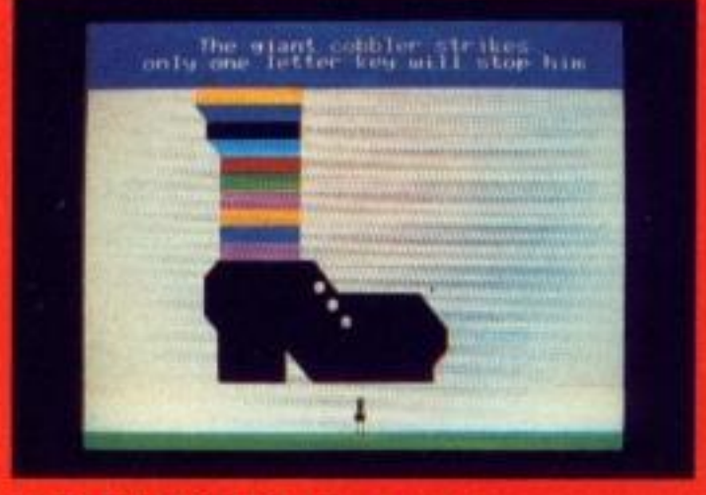
How long can you survive in the multi-storey building filled with alien bugs. This machine-code programme accurately simulates the arcade game where you climb ladders and dig holes to catch the aliens then fill them in again once they are caught. The red ones must fall through one floor, the green ones, two floors and white ones, three floors. Red aliens who have time to dig themselves out get rather cross and become green. PANIC!! Joy stick or keyboard control.

GALAXIANS — £7.95

A high-speed machine-code version of the popular arcade game where the massed space invaders must be cleared from the skies. After a few seconds they will begin to swoop and dive at you, showering you with scatter bombs as they go. The game becomes progressively more demanding as you kill more and more of the marauding aliens. Very entertaining — hours of fun!!! Joy stick or keyboard control.

BACKGAMMON — £7.95

Now available for the MZ-700, this traditional board game can now be played against the computer. Simple to follow instructions for the beginner — higher levels available for the more experienced player.



NIGHTMARE PARK — £6.95

If you have never played this type of game before, you're in for a treat. As you make your way along the intricate pathways to the exit, you are constantly given tasks to perform or games to play. Each of these must be successfully completed before you are allowed to continue. It takes a lot of doing. You must remain quick and alert at all times. A little luck is handy. Amazing graphics and sounds!!!

FIGHTER COMMAND — £6.95

A mission flown completely on instruments where you are pursuing a fleet of ten enemy aircraft fleeing from you. They will show on your long range radar screen and you must manoeuvre your craft to get them within range of your missiles. If you get too near, they will fire at you and warp away to safety. You only have one chance to destroy incoming missiles with your lasers.

CHESS — £9.95

Suitable for the rank beginner through to the more experienced player, this Chess program may be used in three different ways.

1. As a referee between two players, checking for valid moves, CHECK and CHECKMATE situations.
2. As an opponent with 14 levels of intelligence to match your skills.
3. As a teaching aid when asked to play against itself or show you the best move if you get into difficulties.

Long games may be saved on cassette for completion at a later time and a print-out of all moves made is available.

XANAGRAMS — £9.95

Not only a terrific spelling test but also a great game. You are asked to guess up to five words, represented by blocks on the screen in a crossword format. All the letters that you need are shown on the right of the screen in alphabetical order and the computer will give you the first letter if you ask it nicely. Suits almost any age with 3 skill levels and from 1 to 5 words to be guessed. Really habit-forming!!!

LIGHTNING PATROL — £3.95

Choose your rank in the RAF and you are immediately sent on a mission to catch and shoot down ten enemy Mirage jets that are fleeing after their attack on your airbase. You must manoeuvre your plane to get them in your gun-sights whilst they are weaving about the sky to avoid being hit. Limited ammunition and fuel available so efficiency and accuracy are all important to your completion of the mission. Promotion for the successful but poor performances can mean you are asked to leave the air force. Joy stick or keyboard control.

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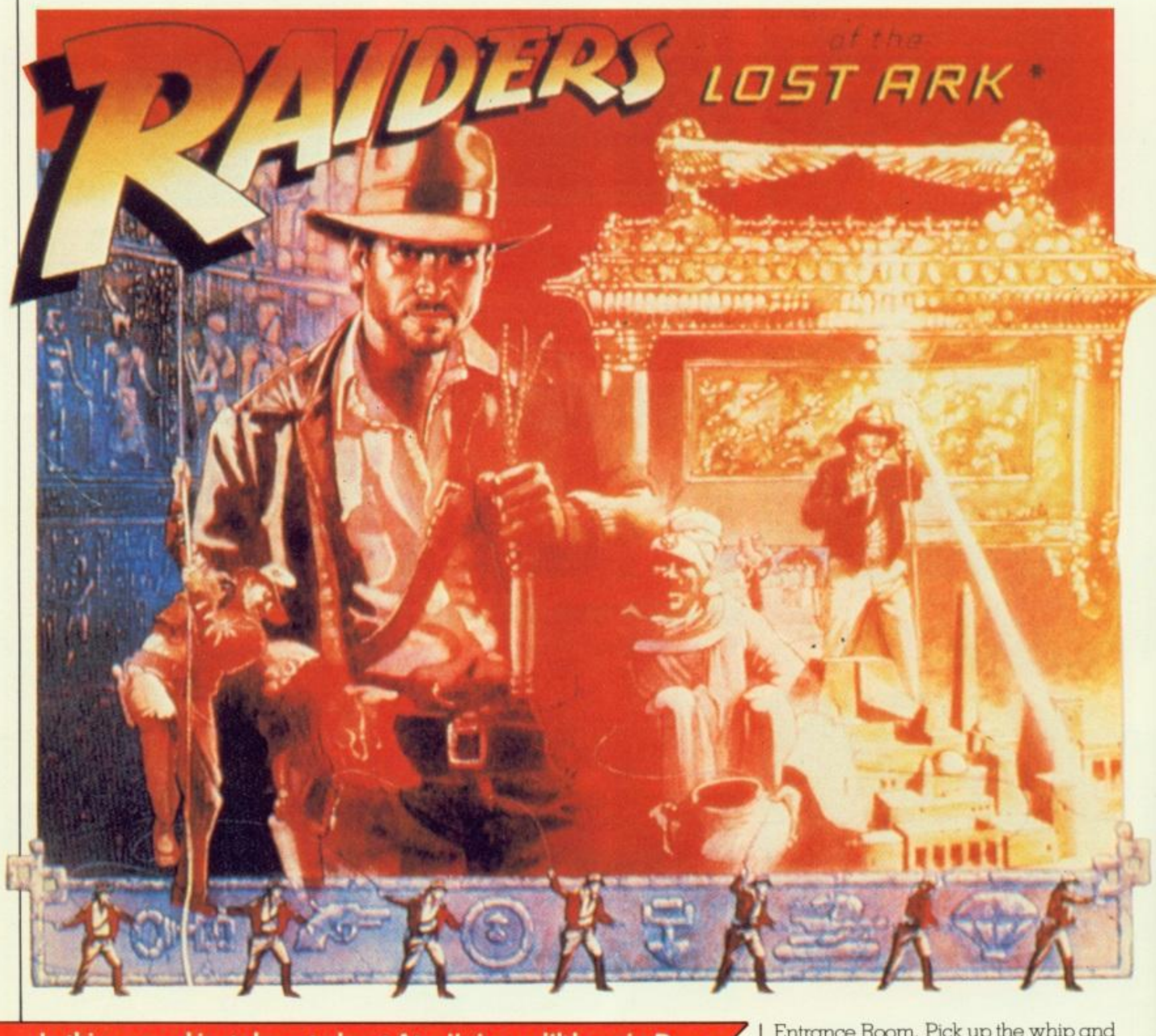
NIGHTMARE PARK – CHOCK-A-BLOCK – SCOOP – CLUB GOLF … …PANIC – BACKGAMMON – MOON FLITE – CHESS – ADVANCED
CHESS – APOCALYPSE – SAFE-CRACKER – GOLD MINER – AT… …DINS CAVE – LIGHTNING PATROL – COMPUT-A-SLOT – SUPE
MOUSE – PARA-SHOOT – TYPE TRAINER – ACE RACER – FIV… …E!!! – POLARIS – MIDAS – DOMINATION – INCA GOLD – UP
YOURS – SNAKER – STARTREK – CHANNEL TUNNEL – CONV… …ATHS – TYPE TRAINER – MATHS TANK – COUNTER-BLAST
MULTI-LINGUIST – BASIC TUTORIAL – SCOOP – WORD INVADE… …RN MATHS – MIGHTY WRITER – BIKER – GET LOST – MUSIC
MASTER – KINGS & QUEENS – MAP OF UK – MATHS QUEST – AL… …AL – DATABASE FILER – SPREAD SHEET – WORD PROCESSOR –

SOLO SOFTWARE

95B Blackpole Trading Estate West, Worcester Telephone (0905) 58351 (24 hrs)

VISA

WIZARD'S WAY



In this second instalment about Atari's incredible epic, Dave Harvey takes you right up to the end of the game with his step-by-step guide to reaching the Ark.

And now for frustrated *Raiders* players! Here is a step-by-step solution for completing *Raiders of the Lost Ark* in a very short time. *Raiders* is a race against time: you must follow the instructions with very little hesitation. Therefore, it is wise to go through the instructions and experiment a few times before starting out on your actual journey to the Ark. If possible, get a friend to help you, and if one is not handy at the time, walk out into the street and grab the first person that comes along. If he or she reads *TV Gamer* this is an added bonus!

1. Reset the game and keep your finger on the controller button. As soon as the pedestal shrinks to the bottom you will appear in the Entrance Room. Pick up the whip and go down into the Market Place.

2. Buy a parachute and go and get the grenade from the basket.

3. Exit from the Market Place at the centre of the screen. This way you will not collide with the snake in the Entrance Room.

4. Leave the grenade at the right-hand side of the Entrance Room and return down into the Market Place.

5. Go back up to the centre of the screen into the Entrance Room and go through the hole in the wall to the Temple of the Ancients.

6. You are in the Temple Entrance Room. Pick up the time-piece and

take the bottom right turning into the Room of the Shining Light.

7. Use the whip for knocking your way out of the dungeon. The best way to do this is to move down until only half of Indy is visible and whip to the right. There will be a hole just big enough for Indy to duck under and get out (the same procedure is used for the left dungeon except you need to reverse the movements).

8. Go to the Treasure Room by standing at the far right-hand side of the screen and horizontally lining yourself up with the two obstacles at the top of the screen. Move right and you will now be in the Treasure Room.

9. Pick up the coins and the hour-glass and go back into the Room of the Shining Light. Knock your way out of the dungeon.

10. Go back to the Treasure Room and wait until one o'clock. Drop the time-piece and pick up another lot of coins and the Ankh.

11. Go to the Market Place by taking the bottom left exit when you get to the Temple Entrance Room. Drop the whip.

12. Go to the basket where you got the grenade, wait for the Head of the Staff of Ra to appear and be very careful of the snake.

13. When the 'Head' appears, select the Ankh to cross the Mesa-field. Do this by simply pressing the button. Cross the field until you reach the bottom Mesa and when you do so, drop the Ankh. Be careful the selector dot does not land underneath the hour-glass.

14. Centre yourself on the Mesa and walk down. You will now be on a thin piece of land with air all around. Walk down again until you are in a room with lots of little things running about inside (be very careful you do not run into one of them).

15. Go to the bottom of the screen and keep walking along until you find yourself in the Black Market. When this happens, buy yourself a shovel and go and stand on the basket at the right side of the screen. Ignore the grenade and wait for the key to show up, but be on the alert for when the key shows up you will have to do a bit of spontaneous thinking and running.

16. Move right and go into the Room

SPECIFICATION

NAME: RAIDERS OF THE LOST ARK
SUPPLIER: ATARI
PRICE: £29.99
FORMAT: VCS
RATING: Value 4
Graphics 4
Sound 3
Gameplay 4

of the Greedy Thieves. In the middle of the screen you will see a patch that has been totally blacked out. Move right into the patch and as soon as the last bit of Indy vanishes move up into the next screen onto the thin piece of land (again, be very careful of the thieves – they could spoil the day).

17. The sun will just about start to rise. Enter the Map Room with the key and stand in the dead centre – the emphasis on dead is very important, as if you do not you will find Indy dead.

18. Select the Head to the Staff of Ra and the location of the Ark will be all yours. Memorise the Mesa and select the key to get out. Go to the Mesa-field and select the hour-glass (you are nearly there!).

19. Go to the Mesa that the Ark is located in and drop the hour-glass. Select the parachute and jump off the Mesa. As soon as you jump, press the button and activate the parachute. Guide yourself into the slot in the Mesa-side and quickly drop the parachute.

20. Avoid the thieves and select the shovel. Dig the pile of dirt eight times by walking back and forth through it, and then enter. You have now successfully completed your task – you have found the fabled Lost Ark of the Covenant!!!

Finding the Ark is quite an achievement but is not the end of the game. As you probably know, *Raiders of the Lost Ark* is crammed full of Easter Eggs and secrets, and one peak of perfection is getting the pedestal at the very top of the screen with the programmer's initials alongside.

Here is a list of some secrets you can try out and an invitation for you to look out for more.

SAFE SPOT

The far right-hand side of the Treasure Room and the Market Place are safe spots where Indy can stand without making contact with the snake.

MYSTERIOUS DOT

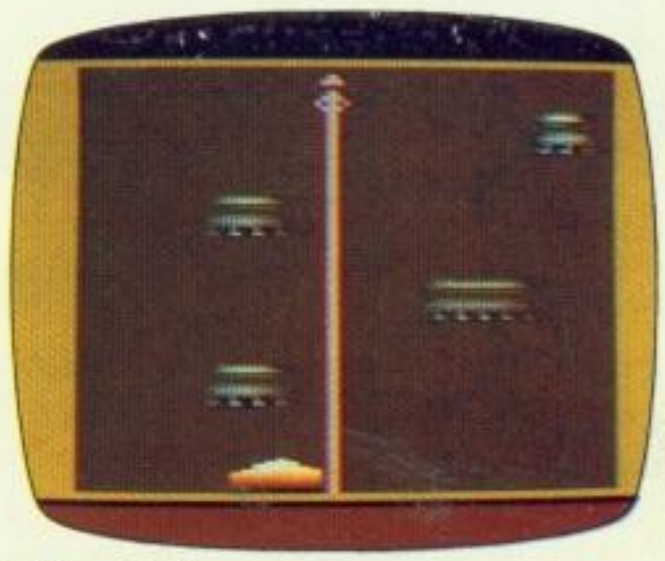
If you leave the grenade in the Black Market (anywhere except the strip in the centre) and go right into the room with the thieves running about inside, you will see the grenade in the exact location it was left in the Black Market. It will vanish if you use the whip or the revolver, of if you let go of the Ankh or the hour-glass. If it is in the path of a thief, he will steal it.

UNEXPLAINABLE BULLETS

Take your revolver and go to a location where the lowest point that you can get is Indy's hat showing. If you shoot it in an upwards direction, the bullet will come from the centre of the screen. This will happen wherever you are standing.

RUBBER INDY

If you use a grenade inside a Mesa or in the room below the thin piece of land and stand at the top of the screen, when the grenade eventually explodes Indy will stretch the length of the screen.



Rubber Indy

THE ROCK

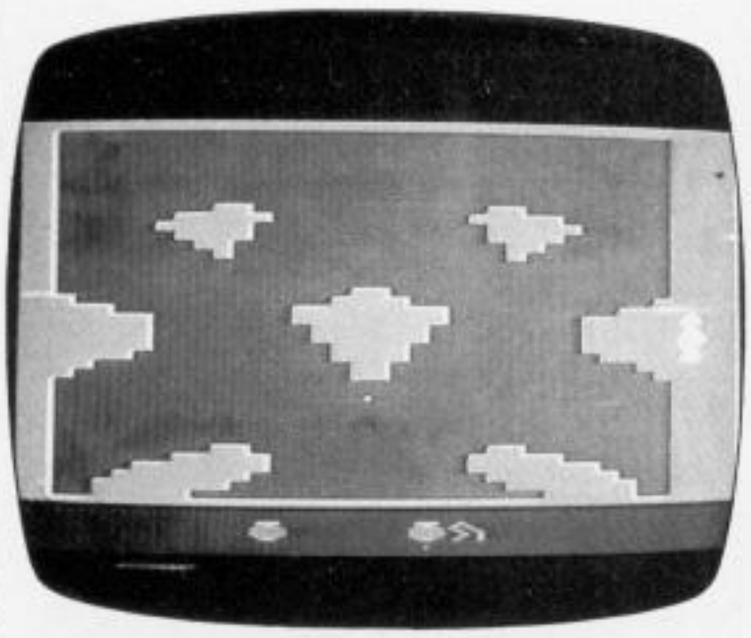
A lot of you are probably wondering what use the rock has got in the game? Well, the answer is it doesn't

RAIDERS of the LOST ARK

seem to have any use but looks *can* be deceiving. If you can get the snake to go exactly through the crack inside it, the rock turns into a large blue Chai and Indy turns into rather small dots.

ODD HAPPENINGS

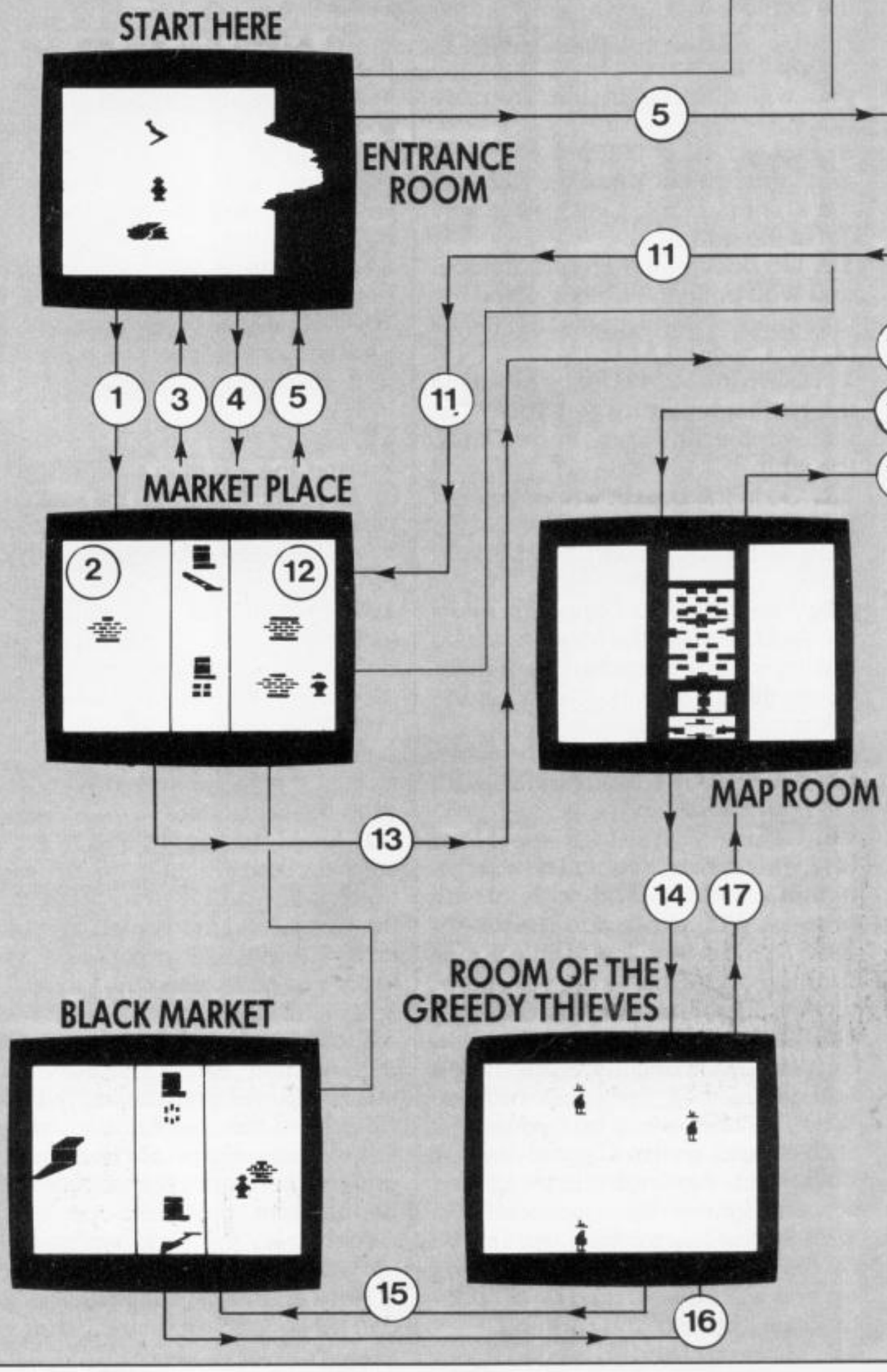
Here are a few more things for you to try.
Select the Ankh and transport yourself to the middle of the Mesa-field. When you have done this, go to the Mesa at the immediate right of the one that you are standing on and get as close to the border of the Mesa-field as you can (when the grappling hook starts flashing intermittently you will know you have it). Drop the Ankh and move right into the border. You can now walk up

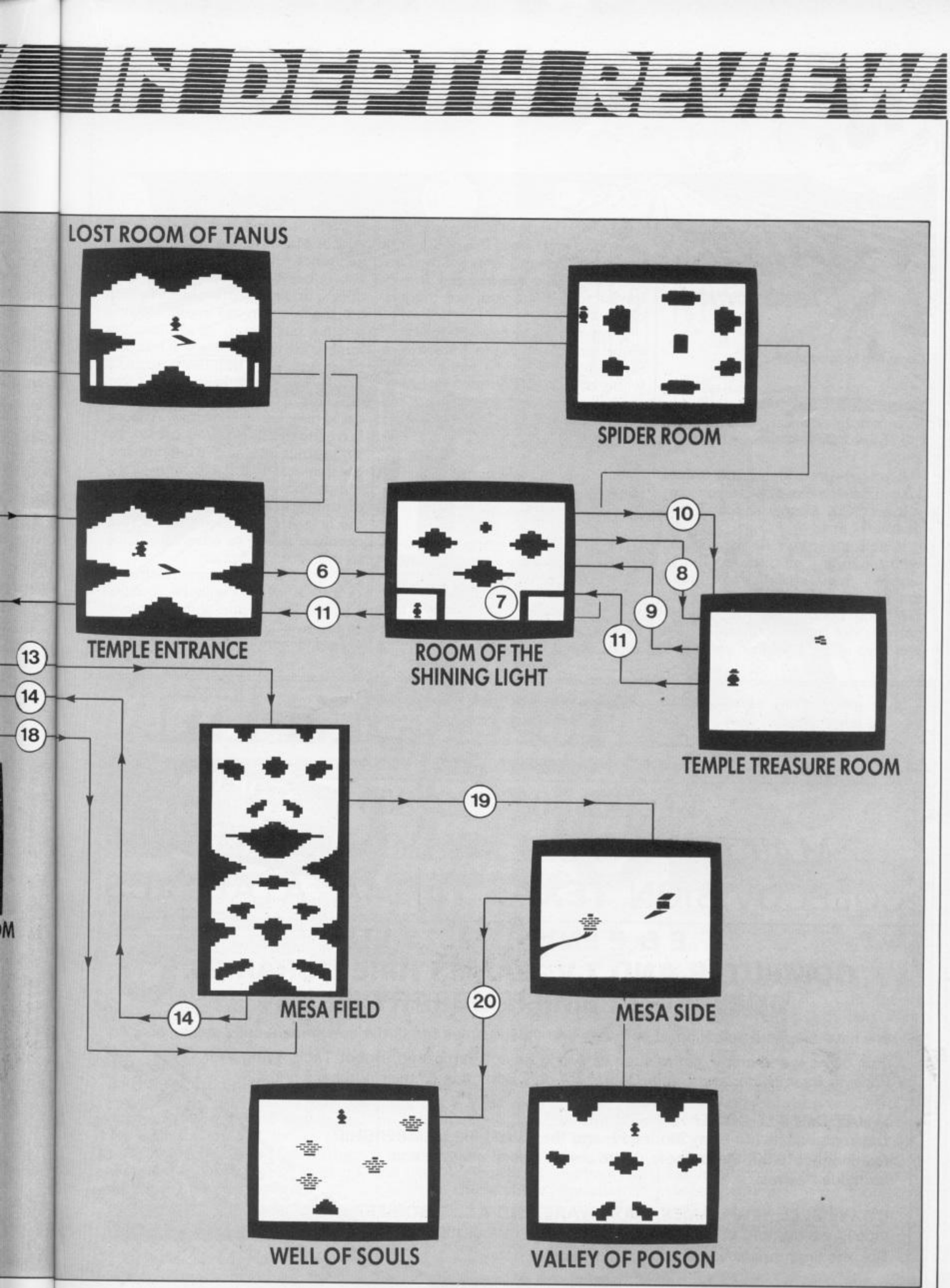


Walking down the edge of the Mesa-field; note the mysterious dot.

and down the Mesa-field as freely as you like (this can also be done in the Market Place and in the surroundings of the thin piece of land). As you walk up and down the screen you will encounter a mysterious dot (number two) on various Mesas, for which so far we've found no use. We will leave you to do a bit of experimenting on your own with this one as lots more strange things can be found – for instance, a one-legged, black-cloaked thief in the Valley of Poison and collecting the revolver from the grenade basket in the Market Place.

Just in case you get lost wandering through Indiana Jones' special world, we've made a map to help you find your way. Some of the rooms are covered in Dave's earlier article in our last issue. This time he's concentrated on explaining the quickest route – the arrows show the right way to go and the numbers relate to those featured on pages 34 and 35.




LOST ROOM OF TANUS
SPIDER ROOM
TEMPLE ENTRANCE
6
11
7
ROOM OF THE SHINING LIGHT
10
8
9
11
TEMPLE TREASURE ROOM
13
14
18
19
MESA FIELD
14
20
MESA SIDE
WELL OF SOULS
VALLEY OF POISON

RAIDERS of the LOST ARK

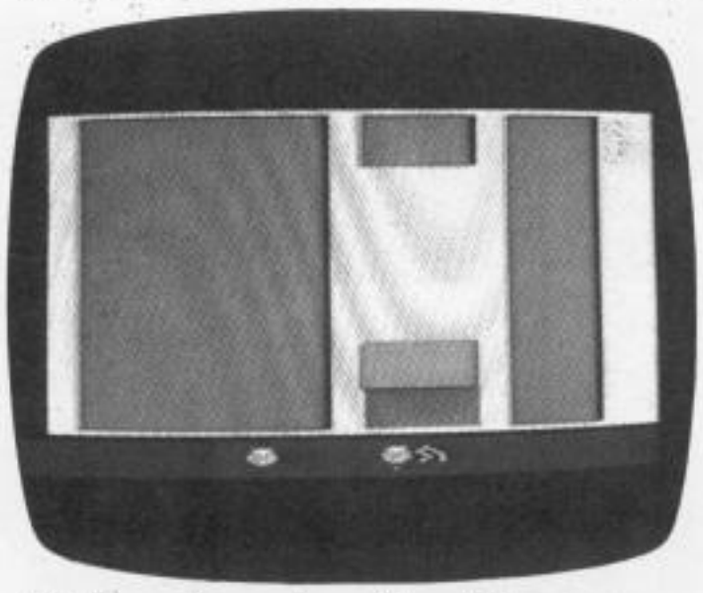
Continued from page 37

Pick up six objects and go and stand on the Chai, if you stand on it in a certain position you can form the shape of a key. Could this be a clue?

If you are in a Mesa and a thief takes one of your objects you can retrieve it by simply shooting into the pile of dirt.

If you drop two bags of coins whilst standing on the rock, black-cloaked thief, basket, Mesa-thief, the pile of dirt or the hole in the Entrance Room wall you will receive a dot (number three) which we have so far found no use for. If you try and let go of it the game will reset and start from the beginning and if you try and let go of it when there is an object above, the screen turns totally black. Atari say this is a clue.

There are many more things to be found on *Raiders* and here are a few to look out for. A rather large white key in the Entrance Room, a



Walking down the side of the map room.

Yar (*Yar's Revenge*) on the flying saucer Mesa (which you must do a sequence of things to get, claim Atari), besides the Head to the Staff of Ra, another extra object (which can be seen on the inventory strip on the box), and, of course, the famous HSW2 signature. It has also been rumoured that there is also a Yar in the Black Market and that one flies up if you get the signature up at the end of the game. Also we have heard that if you are in the flying saucer Mesa at a certain time, the thieves will turn into little ETs.

If you have found anything strange or untoward in playing *Raiders of the Lost Ark* (or indeed any screen game) a secret or otherwise, drop us a line at *TV Gamer*.

A sequel to the game is already planned which will be entitled *Indiana Jones and the Temple of Doom* and have no doubt: it won't be easy! □

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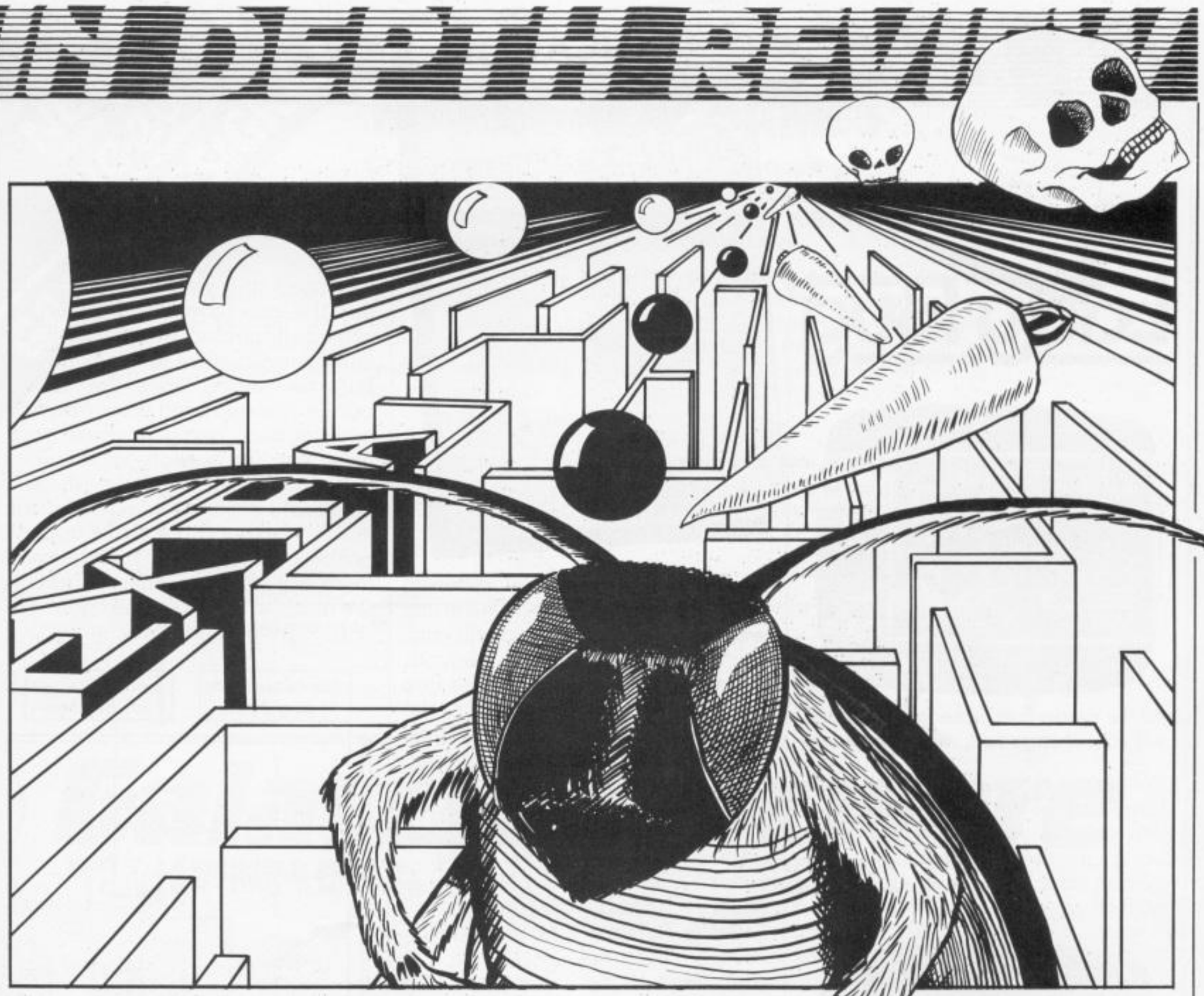
□ **TEXAS TI99/4A**
PLEASE SEND THE PRICE LIST(S) FOR MY SYSTEM(S)



Lady Bug

Dave Trutzenbach's bugbear has been to break 1,000,000 in this tough maze game.

One of the best maze games on the market, *Lady Bug* has all the fast action most of us can cope with from a maze-type game. The aim of the game is to manipulate your Lady Bug around the maze and through the turnstiles to eat the daisies (dots). On your travels you will encounter hearts, letters, skulls and predatory insects. Taking them in that order, lets look at their advantages and their dangers.

HEARTS

These will change colour several times throughout each level – namely yellow, blue and red. Eat the hearts when they are yellow and for each one you will gain 300 points, eat them when red and you gain 800 points. When they are blue you will gain only 100 points for each one, but if you manage to eat all the hearts when they are blue your score will be multiplied by five for every daisy eaten, i.e. one daisy is normally worth ten points when eaten but increases to 50 points if all the hearts have been eaten when blue. Eat two blue hearts and the daisies increase to 30 points each – if you manage only one blue heart each daisy will be worth only 20 points. The indicator in the top right hand side of the screen will tell you how many blue hearts you have eaten.

LETTERS

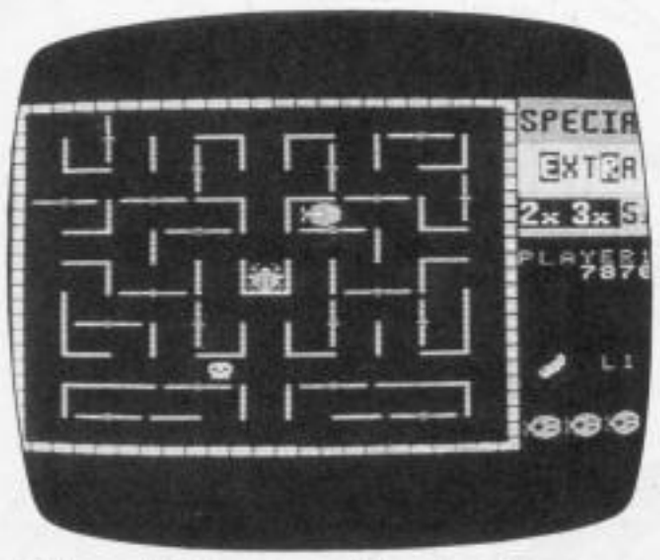
These also change colour at the same time as the hearts. Their function is as follows – if you eat them when they are yellow you can, over the course of several levels, spell out the word EXTRA and this will give you an extra Lady Bug. When you eat the letters when they are red, you will eventually spell out the word SPECIAL and you will then be transported to try your luck at the Vegetable harvest. This is just a maze screen – there are no predatory insects to chase your Lady Bug, there are no daisies to eat, and no skulls to bump into. Vegetables will appear at random on the screen and your aim is to pick up as many as possible in the time allowed. This will gain you a lot of bonus points.

It is for you to decide whether to go for EXTRA or SPECIAL. These

Lady Bug

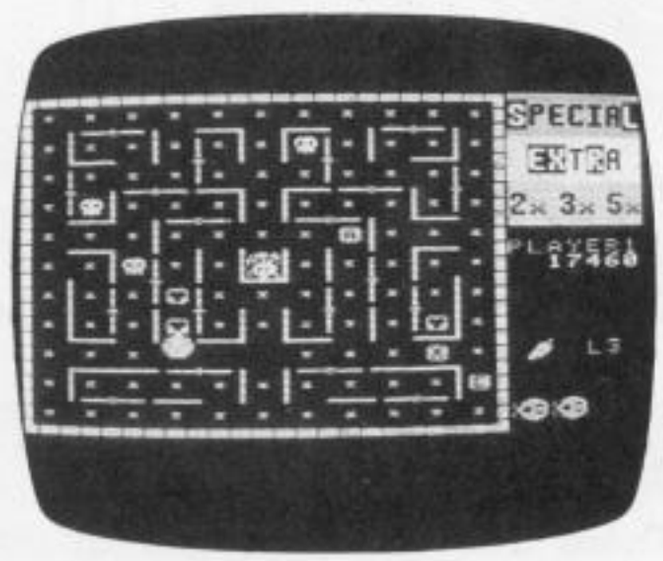
SPECIFICATION

NAME: LADY BUG
SUPPLIER: CBS ELECTRONICS
PRICE: £29.95
FORMAT: COLECOVISION
RATING Value 3
Graphics 3
Sound 3
Gameplay 4
Arcade 4



All the daisies are picked – the screen will now change up to the next level.

are also displayed on the top right-hand side of the screen. The skulls will destroy your *Lady Bug* if you bump into them. They will also destroy an insect if it comes into contact with them.



The Lady Bug is about to chomp some nice blue hearts.

The insects, four on each level, emerge one at a time from the centre of the maze, from what is known as the Bug Box. The insects appear from the Bug Box each time the timing border completely changes colour. The timing border runs round the outside of the maze and changes from white to green and then back to white throughout the game.

VEGETABLES

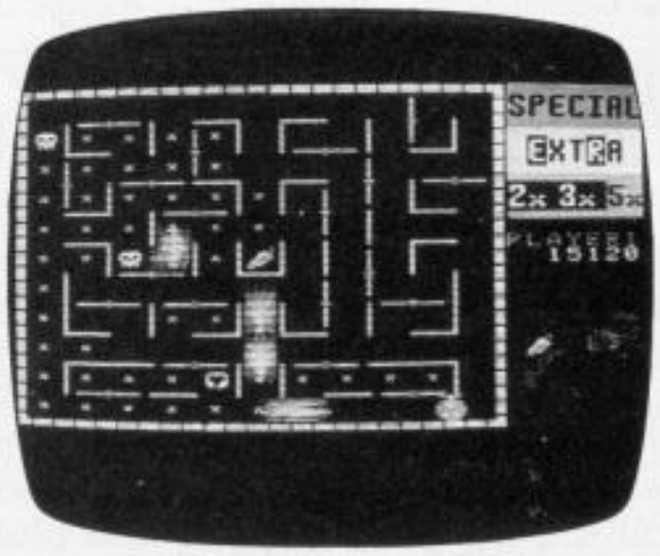
When all four insects have emerged from the Bug Box and are chasing your Lady Bug, a vegetable will appear in the Bug Box. You must try to eat this. There is a different vegetable on each level. On the first level it is a cucumber and will earn you 1000 points every time your Lady Bug manages to get the Bug Box and eat one. The value of the vegetables increases by 500 points on every level. The first six vegetables are below – it is up to you to find out what the next 12 are!

Level 1 – Cucumber – 1000 points.
Level 2 – Egg Plant – 1500 points.
Level 3 – Carrot – 2000 points.
Level 4 – Radish – 2500 points.
Level 5 – Parsley - 3000 points.
Level 6 – Tomato – 3500 points.

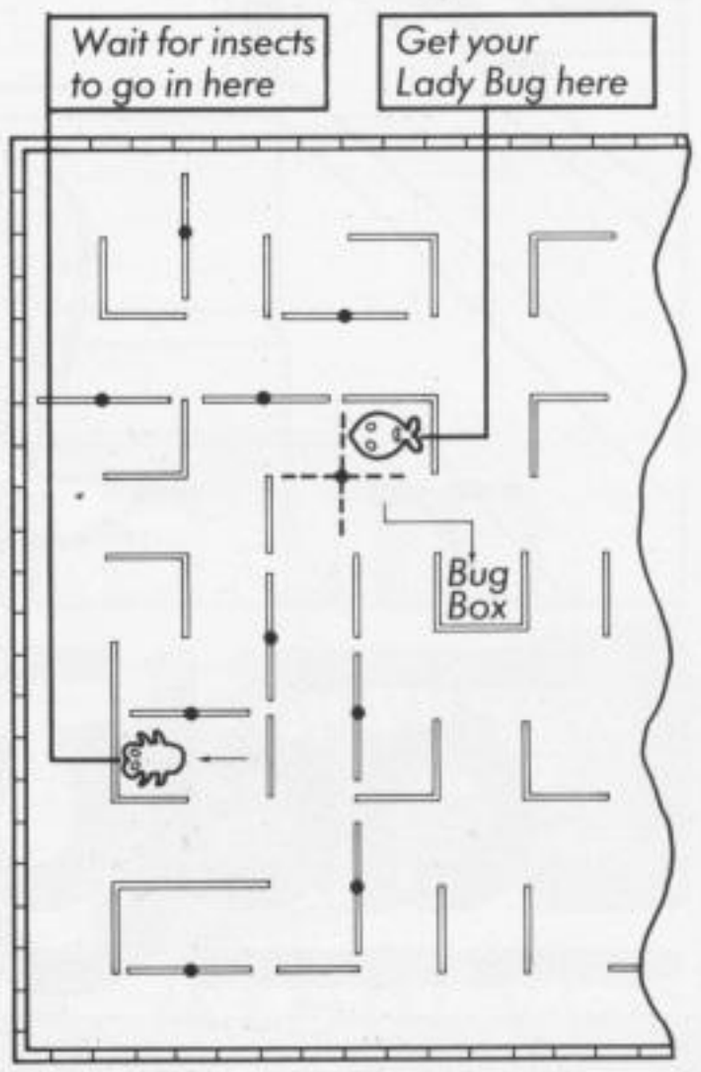
After level 18 the last vegetable is repeated.

SKULLS

These can assist you or be your downfall. As mentioned before, if your Lady Bug bumps into them you will die and a Lady Bug skeleton will appear, accompanied by a death tune which you will get to hate! The skulls can also help you, however. If you are cornered by an insect, try to get the skull between the insect and your Lady Bug and lure the insect towards it. When he comes into contact with the skull, he will die and return to the Bug Box. But, remember, once the timing border has changed colour he will emerge once again to chase your Lady Bug. In its place as it comes from the Bug Box will be another vegetable waiting for you to devour it. Only two or three skulls appear on the lower levels. At higher levels more skulls will be positioned around the maze so you have the chance to earn more bonus points.



A carrot in the box! Note how fast the four bugs are whizzing around to prevent Lady Bug from getting the vegetation.



The bugs stay dormant in the position shown, and also at a similar place on the right-hand side of the screen.

INSECTS

There are eight different types of insects in all. At first, four identical insects appear on each level from one to eight but after this you get four different insects on each maze. Each insect moves differently, so *beware* and watch out for their funny little ways. They also move much faster on the higher levels.

Their are only two ways to get to the next level. One is to eat all the daisies, hearts and letters. The other way is by spelling out the words EXTRA and SPECIAL.

Continued on page 65

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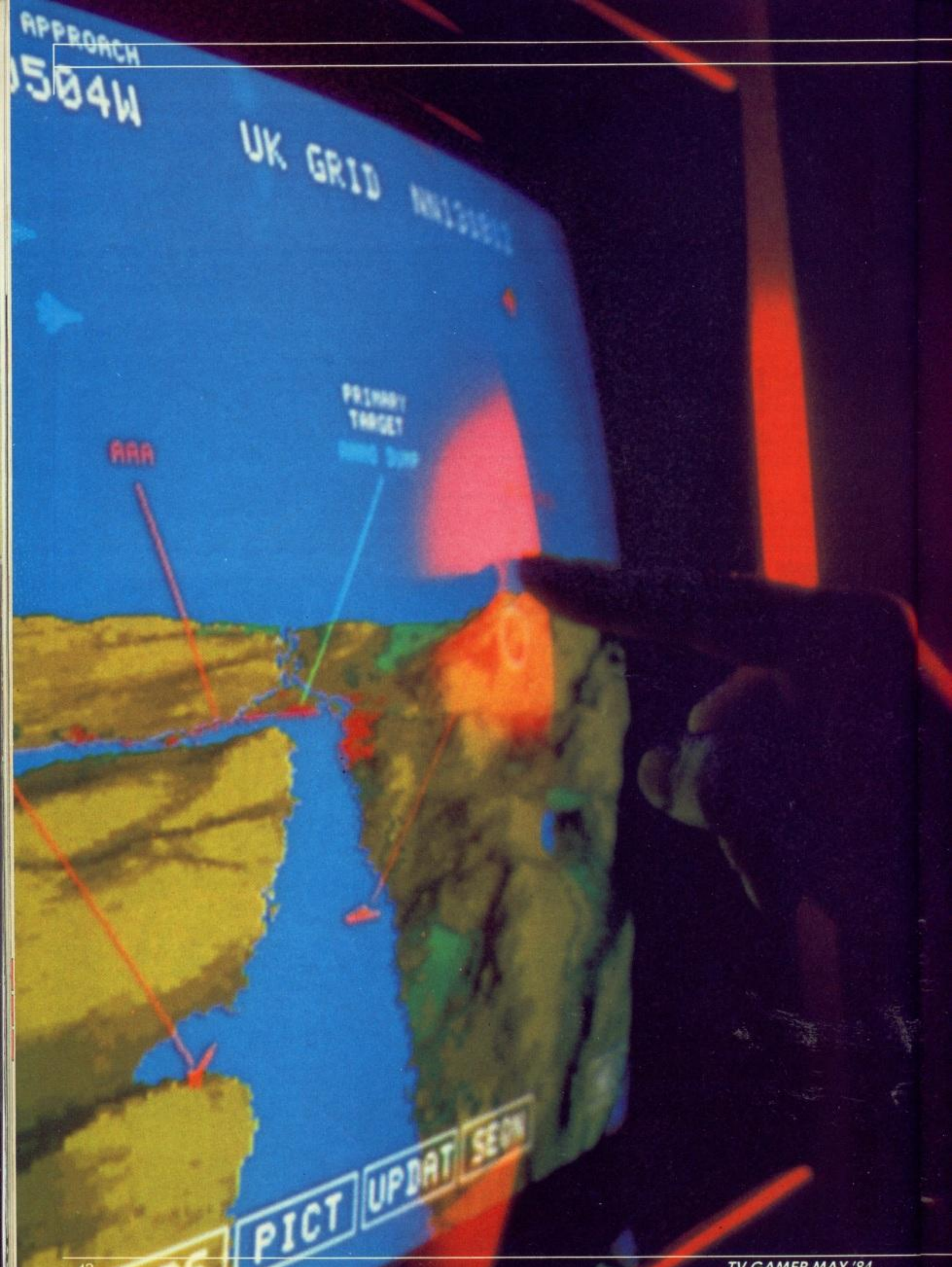

APPROACH
5504W
UK GRID
PRIMARY
TARGET
AAA
MAPS
PICT
UPDAT
SEEN

British military war games computer (EASAMS) display with touch sensitive screen showing perspective view of terrain.

GAMES WAR MEN

If anyone mentions war games these days the immediate response is usually for the listener to imagine vast underground bunkers filled with huge screens plotting intercontinental missiles on their maiden and terminal flights to join in World War Three. An image that springs, of course, from the movie *War Games*.

The history of war games goes back a very long way, however, so lets push our memories of the movie aside for a moment and look into the past before investigating the state of the art.

Model armies have been found in ancient sites by archaeologists all over the world. Particularly fine sets dating back to the Middle Kingdom (c. 2300BC) were discovered in the pyramids in Egypt. And it takes no great leap of the imagination to picture the Pharaohs using these models on a patch of sand fashioned to resemble a potential battlefield, to illustrate their plans to their generals.

Certainly by the time the Prussian General Staff were planning the reunification of Germany in the nineteenth century, not only were they using scale models to refine their plans, but they had developed a very complicated set of rules so that the representations of conflict could be as realistic as possible. Getting these rules right took a lot of time and demanded some of the finest military minds available. After all, if you overestimated the speed your troops could march, the careful planning with the models was all wasted time. What's more, your soldiers in real life could be in serious trouble!

During the Second World War, war-gaming Japanese Admiral Yamomoto refused to believe that his battleships would be sunk when the rule book said they were. In the real

Continued from page 43

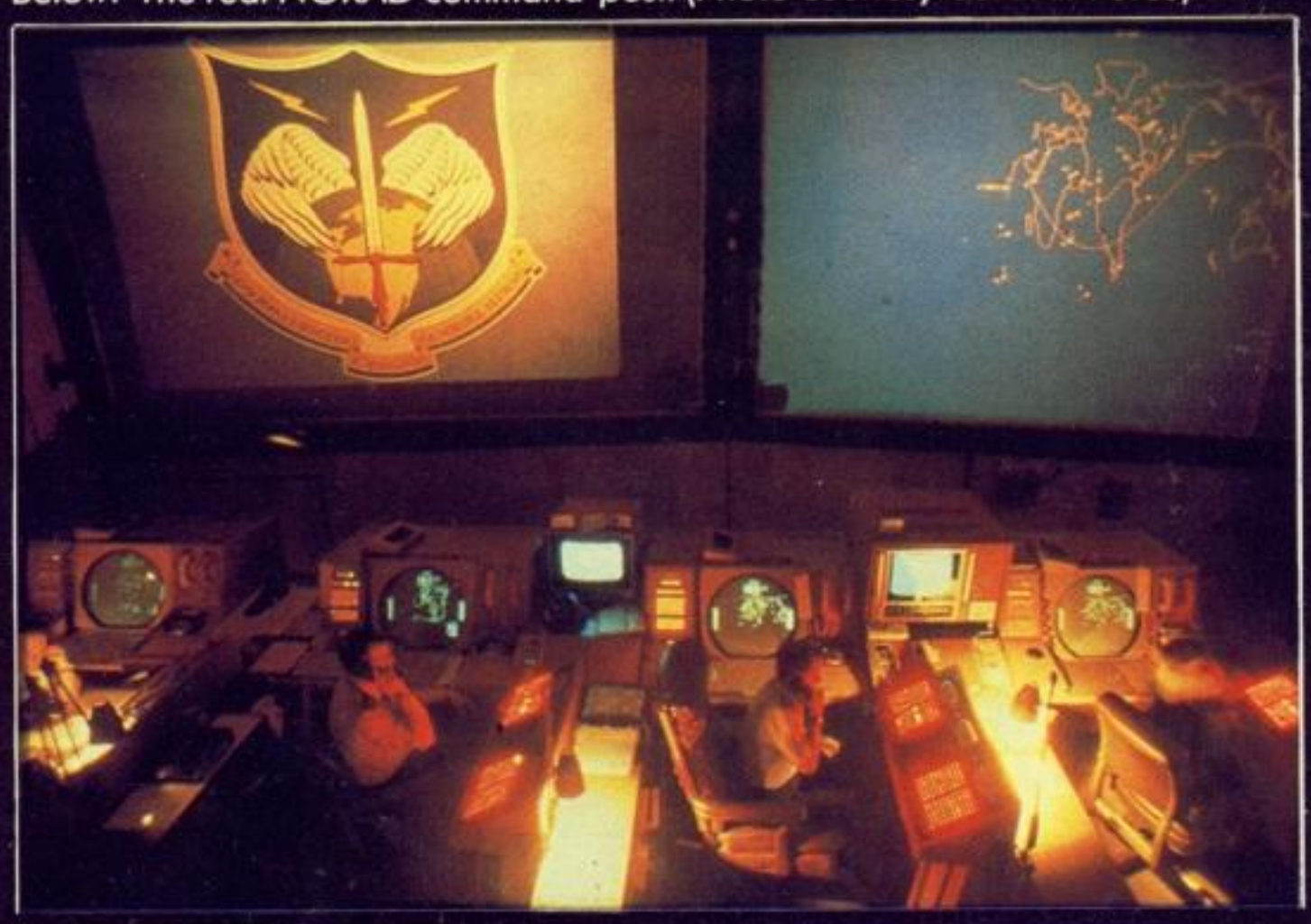
battle of Midway, however, he found that he was wrong!

The re-creation of war on a table-top caught the imagination of the armchair strategist early on. H.G. Wells not only wrote science fiction, but also published a book called *Little Wars* in which he gave rules for fighting campaigns using those lovely old 2-inch high tin soldiers. As these rules are very basic, relying on model spring-loaded cannons shooting tiny metal shot, it is no suprise that the figures which have survived are both rare and very battered.

However, the art of war gaming for fun quickly caught up with military science and you can now re-fight almost any battle or skirmish from history. And if that is not exciting enough, there are even rules for Elves v Goblins or boarding a 22nd century starship. These rules have become so sophisticated that they fill whole books and take into account so many factors – such as the weather, morale and the commander's personality – that a game can take ten times as long as the real life action.

Above: The MGM/UA movie War Games' *impression of the NORAD computer.*

Below: The real NORAD command post. (Photo courtesy USA Air Force)



Detail from Eastern Front *by Atari.*

Today the art of war gaming is taking yet another leaf from the book of the military technologist. Just as technology has embraced the micro-chip as a way of building cost-effective training simulators (see *TV Gamer* for March and April) so, too, the potential for using computers and video for speeding up a general's war gaming skills is being exploited.

The result is impressive, and has greatly improved a commander's ability to react quickly to any situation. Gone is the wall-hung map with symbols marked up in coloured pens and new information relayed back by coded radio messages. During today's military excercises, the commander of a US Marine Division, for example, will sit in front of a plasma display which gives a map of the combat area overlaid with symbols indicating the position of his own troops and the known positions of the enemy units. Similar screens will be found at regimental and battalion level. At each one of these locations sits a man who has, instead of coloured pens, a keyboard. His job is to update the map at his location with any information that comes to hand, but because each location is part of an integrated network, this updated information is immediately shared by all. In addition, forward troops can be issued with small, hand-held, digital communciation terminals, so they can instantly input information right back to the divisional commander. So, the general can sit watching his screen, sure that he has an excellent view of his forces and by using the system in reverse he can quickly give orders to his troops.

Here in Britain a similar system has been developed, but with even more refinements. No need for a keyboard here (useful, because typing is not often a skill associated with generals), instead a touch-sensitive screen allows the user to alter the display in a number of ways.

For example, a continuously updated picture from an air-defence system can be displayed. Touch the screen at

Continued on page 65

The New Games

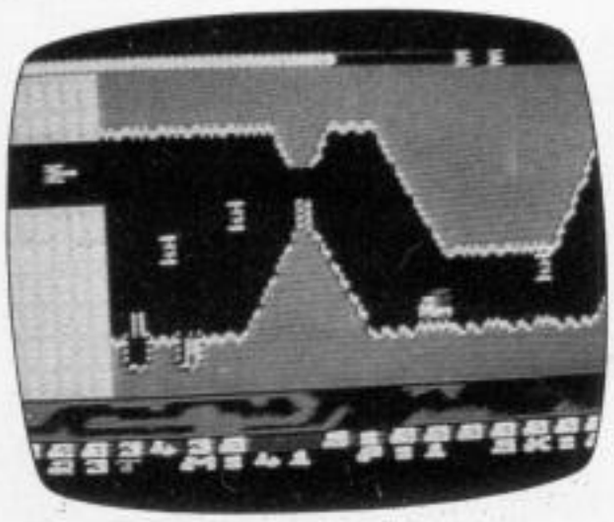
We've been looking at the latest games on sale now or soon to be released.

AIRSTRIKE 2

ENGLISH SOFTWARE
ATARI HCS 16/32K
1,1+1
SCI-FI SHOOT 'EM UP

Unlike films, games sequels tend to match the earlier games. This one betters the immensely popular *Airstrike*.

Both games are obviously inspired by the coin-ops *Scramble* and *Super Cobra*. However, this game is much more complicated than either of those, because you are given a choice of paths to follow. What really sets this game out from the rest is the fact that your craft has limited weaponry which means, in later waves, that every shot must count.



One nice addition would have been most welcome: a *continue* option, like the one featured in Parker's *Super Cobra*, as many gamers won't get to see the final wave for quite some time.

As with most English Software cassettes, a 16K version and a 32K version are both included on the same tape. The 32K version features smoother scrolling and a long-range scanner at the bottom of the screen. One to add to your collection.

Value 4, Graphics 4, Sound 3, Gameplay 4

BEAR BOVVER

ARTIC COMPUTING
SPECTRUM 48K £7.95
1 single game
CLIMBING

One of the best versions of *Burger Time* ever, featuring some very nice animation indeed. Ted has just bought a Sinclair electric car which on-screen looks like a small truck with a great big battery on the back. However, the battery soon wears out and Ted must climb scaffolding to fetch another down. His job is made difficult by the fact that mean bears and a lizard-type creature are chasing round after him in the hope of bopping him before he succeeds in his mission. Ted does have a supply of time bombs which he can drop in order to ensnare unsuspecting nasties.

In addition to the great graphics, there is also a strategic element that is not in the *Data East* coin-op or the Intellivision squarius game. You have to drop the batteries in the right order otherwise a battery will drop down in front of the car and crash into it.

Certainly one for your collection, if only for the graphics.

Value 3, Graphics 4, Sound 3, Gameplay 4

BUCK ROGERS

SEGA ENTERPRISES
ATARI HCS
1 single game
SCI-FI SHOOT 'EM UP

This cartridge is loosely based on the coin-op *Buck Rogers and the Planet of Zoom*. We say loosely because not only is the title different but so also is the layout of the game. Gone are the trench scenes, the mine fields, the walls and the flat terrain. Only the pylons and the mothership sequence survive. The first three screens all have pylons in them. The first just has pylons, the second also has flying saucers and the third has saucers and hoppers. The fourth screen has our hero in deep space going after the mothership, which only appears after your quota of saucers has been vanquished.

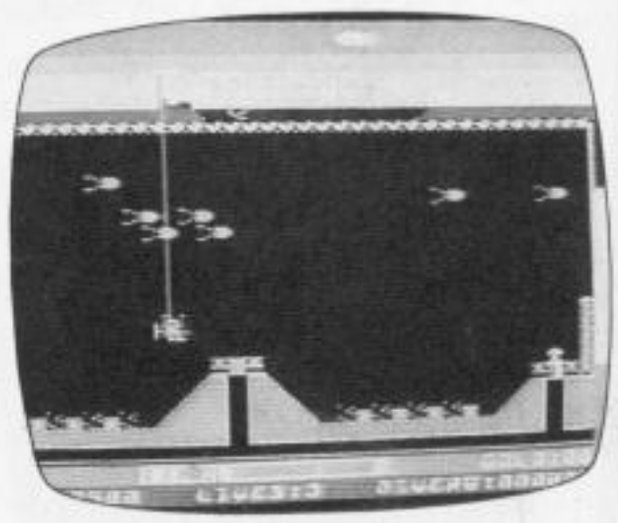
A very good game and certainly a challenging one, but fans of the coin-op may find this version a bit wishy-washy by comparison.

Value 3, Graphics 4, Sound 2, Gameplay 4, Arcade 2

CAPTAIN STICKY'S GOLD

ENGLISH SOFTWARE
ATARI HCS
1,1+1 8 variations
SKILL

As Captain Sticky's new crew member, you are responsible for the maintenance of his diving suit. The Captain's supply of bubble gum has dwindled so now it's up to you to recover as much gold from



the bottom of the sea as possible to help replenish his supply of bubbly (gum that is).

To do this you must lower yourself down to the undersea platform and pick up the gold bars as they arrive. The rope which lowered you down will

The New Games

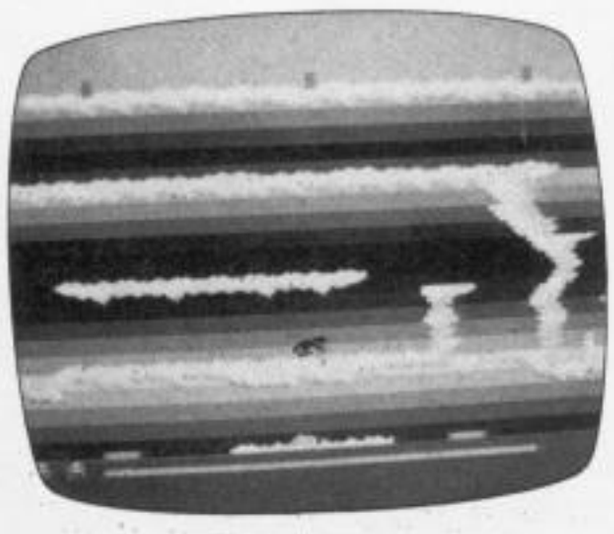
then hoist the gold up to the ship. Having done this, you must surface to grab the rope before your air supply or time runs out.

Quite a nice game but not the best thing to come from English Software. There is no real difference to the game in the 32K version. The only extra we noticed is a hi-score table.
Value 3, Graphics 3, Sound 3, Gameplay 4.

CAVERUNNER

ENGLISH SOFTWARE
ATARI HCS 32K
1,1+1 3 variations
SKILL

Rather like Synapse's *Pharaoh's Curse* only more tactical. The idea is to get through a cave system and pick up all the treasures on screen, one after another. To do this you must avoid a variety of different obstacles,



ranging from Magic Moss to Lava Bombs. Controlling your adventurer is quite complex but with some practice it isn't too difficult to master.

An enjoyable game and a pleasant change from the general run-of-the-mill cassettes.
Graphics 3, Gameplay 4

CHESS (CYRUS)

DRAGON DATA
DRAGON 32
1
STRATEGY

A good chess game with excellent graphics that really use up a big section of the screen. Disadvantages include the absence of a joystick option – the cursor is moved only by cursor keys. It would have been better to have the option of keying moves using either algebraic or traditional notation. The program allows options of taking back moves and setting up problem positions. It offers nine levels of play, the ninth level being an option for exhaustive analysis up to 11 moves ahead. Levels 2 and 6 are particularly recommended by the manufacturer: level 2 giving a challenging quick game and level 6 offering a tough battle with a claimed average move time of 2 minutes. In practice, the level 2 game lives up to expectations but the level 6 game is overly ponderous, sometimes taking as much as 10 minutes to decide on an obvious move, like castling.

Value 0, Graphics 4, Sound 0, Gameplay 3

DEFENDER

ATARISOFT £29.95
COLECOVISION
1, 1+1
SCI-FI SHOOT 'EM UP

An extremely good conversion from the arcade game. All the attacking forces from the arcade game rear their ugly heads in Coleco's version of *Defender*.

Firing is controlled from the left-hand button whilst the smart bomb is activated by the right-hand button. Hyperspace is used through button 0 on the keypad. The spaceship can be turned about face by a simple pull on the joystick in the direction in which you wish it to turn.

The Hyperspace effect on this game is rather disappointing as the transformation from one place to another is instantaneous and does not show the spaceship reforming as in the arcade version. However, this is countered by the brilliant effect when a spaceship is hit. Although no gamer wishes to be blown into space debris, it is almost worth it just to see the special effect.

The radar on the Colecovision *Defenders* only pretence, as it does not show enemy positions.

Value 3, Graphics 4, Sound 3, Gameplay 3, Arcade 3

DONKEY KONG

ATARISOFT
T1-99/4A £24.95
1,1+1

At last! A classic arcade game for the Texas owner. Licensed by the originators, Ninetendo, *Donkey Kong* is the familiar story of the stubby, animated Mario trying to overcome all obstacles to rescue his girl from the clutches of the famous hairy Kong.

The game has all *four* screens – Ramps, Rivets, Lifts and Conveyors – unlike some versions which have only three. Colour, graphics and animation are superb, reflecting in every way the original arcade version.

An excellent all round family game, which Texas owners will welcome.

Additionally, there is the bonus on the Atari cartridge of having an "easy grip". This is more positive than the regular Texas ones, thanks to a well designed moulding. *Dennis Hemmings Graphics 4, Sound 4, Gameplay 4, Arcade 4½*

FUN-PAC 2

(Three games)
VIRGIN GAMES
T1-99/4A £6.95

1+10
Escape the Mugger
(Graphics)
You're in a room with a mugger

The New Games

who has the ability to move diagonally, and with an amazing turn of speed. While he is making for you, he drops his ill-gotten gains and, later rather than sooner, the key to the room in which you are both locked. Using the fire button or keys, you can build a wall to hide behind. Sounds simple? While evading him, try to score by picking up the valuables he has dropped. Incidentally, you are limited to the amount of wall you can build.

The pressure is always on in this tricky game, which scores for up to ten players. Joystick or Keys.

1 **Starship Supernova**
(Text adventure)
In this game you must enter and regain control of an alien ship before it plunges into Supernova. A well written test of your logical (and illogical) thinking.

1 + 6 **Gunfighter**
(Text, some sound and graphics)
You'll need to be fast with the digits to survive these ten random baddies. After you have input your skills, you are given options of Run, Fight, Reload, Move, Shoot or Brawl. You and your opponents are incapacitated by percentages, together with the choice of weapon to suit the situation. Don't linger with your finger *before* you are supposed to fire, the program doesn't tolerate cheatin' critters. Scores for up to six.

This games cassette has excellent instructions, and offers a balanced diet to suit the taste of most Texas owners.
Dennis Hemmings
Value 3, Graphics 4, Sound 3, Gameplay 4

GALACTIC ABDUCTORS

ANIROG £5.95
SPECTRUM 48K
1 single game
SCI FI SHOOT 'EM UP

The title may suggest a sort of *Defender*-type game but in fact the game is more of a *Phoenix* lookalike.

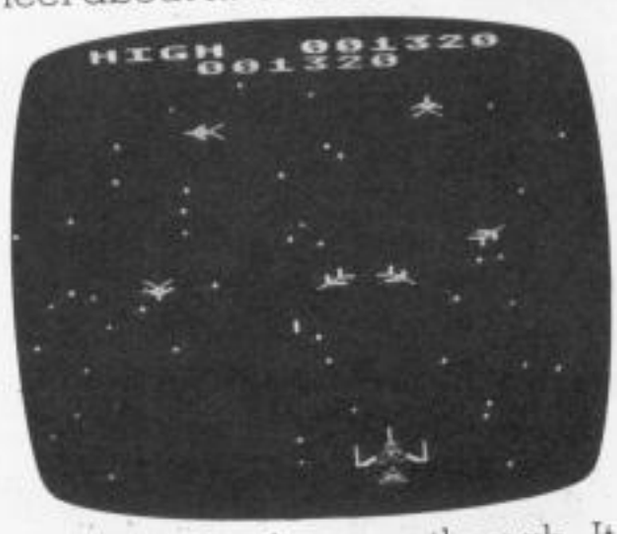
Cosmic bird-like aliens must be destroyed before they swoop down and pinch one of your five humans from the right-hand side of the screen. If all five humans are lost then one of your lives is also lost.

Not a bad game but some joystick options wouldn't have gone amiss.
Value 3, Graphics 3, Sound 2, Gameplay 2

HYPERBLAST

ENGLISH SOFTWARE
ATARI HCS
1,1+1 3 variations
SCI-FI SHOOT 'EM UP

A fairly run of the mill *Galaxian*-style shoot 'em up which has a definite *Phoenix* feel about it. This doesn't mean



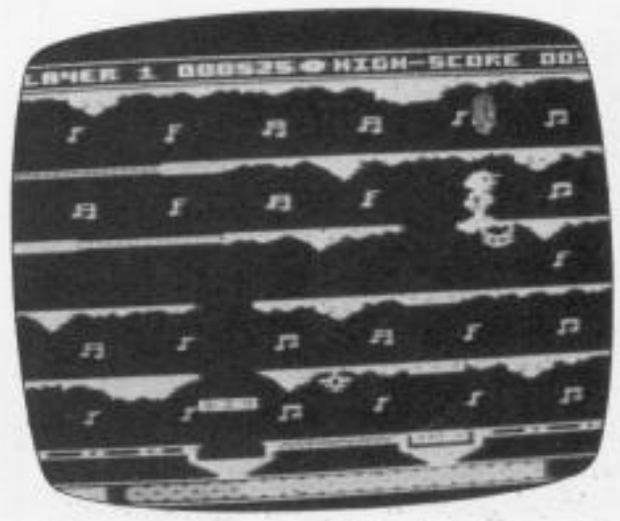
that it's a bad game, though. It is one of the fastest of its kind and it features ten different nasties.

A game to keep the reflexes sharp but it didn't really warrant being a 32K game and is certainly not worth upgrading your micro for.
Value 3, Graphics 3, Sound 2, Gameplay 3

JET BOOT JACK

ENGLISH SOFTWARE
ATARI HCS 32K
1,1+1 5 variations
SKILL

Jet Boot Jack is a space age jogger whose job it is to run round the ten levels of a futuristic record-pressing plant, collecting musical notes as he goes. Jack must use all his resources in order to outwit the Bugs and Gremlins that also inhabit the plant.



Lifts, conveyor belts, ramps etc are all at Jack's disposal in this game that captures the best elements of games like *Minor 2049er*.

In short, a first rate game and excellent value for money.
Value 4, Graphics 4, Sound 3, Gameplay 4

KRIEGSPIEL

BEYOND
DRAGON 32 £6.95
1, 1vl
STRATEGY

An excellent war game marred, alas, by a superficial program for the computer-versus-single-player option. Your forces are marshalled round your capital city and, as the enemy army starts on the

offensive, you move your troops according to weather conditions, terrain, fire-power and manoeuvrability to defend or counterattack. Jusk like a boardgame, *Kriegspiel* has the added advantage that the player does not concern himself with counters, dice or the niceties of the necessarily complicated rules. Graphics are pleasant, but it is a shame that there is no option of a total map of the campaign on screen as well as the detailed one-twelth scrolling view. In the single-player version, the program obliges the computer to move troops in a predetermined order – often so that they restrict each other's movement. This lack of mobility, not shared by the player, gives him a powerful and usually winning advantage.

Value 3, Graphics 4, Sound 2, Gameplay 2

LEGGIT

IMAGINE SOFTWARE £
ATARI HCS
COMMODORE 64
1,1+1
CLIMBING

Regrettably, this game is one of the worst we've seen for the Atari Home Computer System – the game idea is weak and the tape is not saved by good graphics or sound.

To cut a short story even shorter, the object of the game is to get your man from the bottom of the screen to the top by jumping through gaps in

lines that scroll by. However, the game is virtually impossible to beat thanks to the length of time your little man takes to recover. It's so infuriating that it makes you want to bite great chunks out of the cassette! The programmer obviously took far more time and trouble over the title screen than he did on the game.

In all fairness, we should say that the Commodore 64 version might be a lot better, but we can't comment on that at present. One thing that can be said and that is, avoid this game and spend your money on something else.

Value 2, Graphics 1, Sound 1, Gameplay 1

MOON BUGGY

ANIROG £5.95
SPECTRUM 48K
1 single game
SCI-FI SHOOT 'EM UP

Anirog's adaptation of the Williams coin-op *Moon Patrol*, although it's neither a faithful adaption nor an improvement on the coin-op.

The idea is to cover as much lunar terrain as possible by shooting flying aliens, boulders and tanks, and jumping land mines, missiles and craters.

The program allows you to choose from keyboard or most of the leading joystick interfaces, including Kempston, AGF and Sinclair Interface II.

Quite a good game but lacks the *Scramble*-type strategy element of the coin-op or the VCS version.

Value 3, Graphics 4, Sound 3, Gameplay 4, Arcade 2

OMEGA RACE

CBS ELECTRONICS
COLECOVISION
1, 1+1, 1v1 5 variations
SCI-FI SHOOT 'EM UP

The screen-display on this game is simple in concept, to allow for the fast-moving action which takes place. In the middle of the picture is the centre barrier in which each player's scores are constantly displayed.

Pilot your space craft towards the enemy droids and try to zap them with your laser guns. the faster you can accomplish this the better, because if the droids are not destroyed quickly they become mean death ships which lay mines and fire lasers. The droids themselves have no firepower, although contact with them ends in destruction. Enemy forces are led by fearless fleet leaders whose lasers can blast you out of the sky.

Value 3, Graphics 3, Sound 2, Gameplay 3, Arcade 4

GUIDE TO LISTINGS

NUMBER OF PLAYERS

1 One player against the game.

1+1, 1+2, 1+3 Two, three or four players, each taking turns.

2 Two players, playing the game together.

1v1 Two players, playing each other, with the game simply keeping score and acting as referee.

HOW GOOD IS THE GAME?

TV Gamer's panel of game players has assessed the games reviewed here on a scale of increasing value from 0 to 5. While these assessments are only a personal opinion, we hope they will help readers to plan their purchase of future games.

The five areas covered are value for money, quality of graphics, quality of sound, quality of gameplay, and fidelity of arcade transfer (where applicable). □

PARCO Electrics

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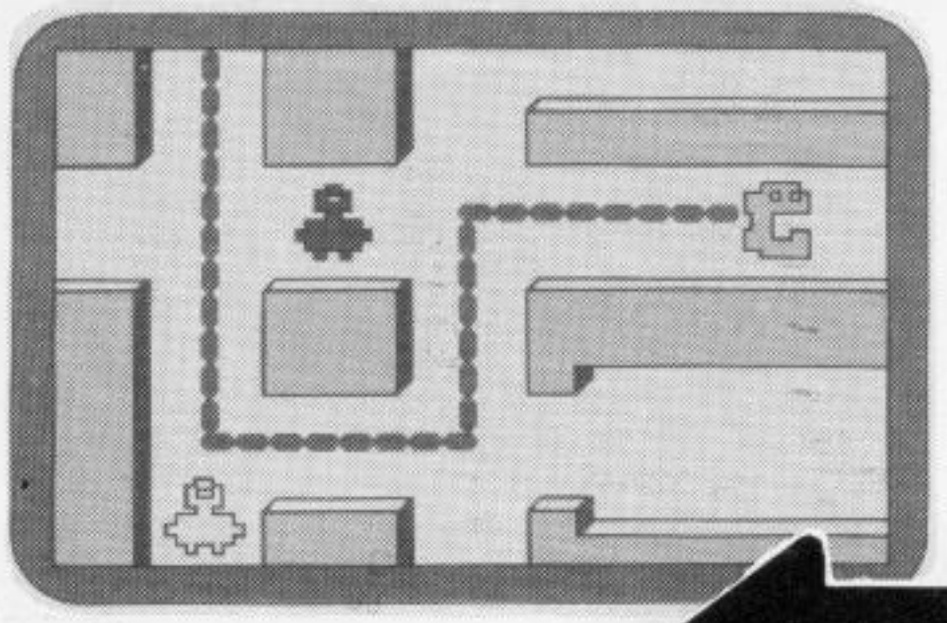
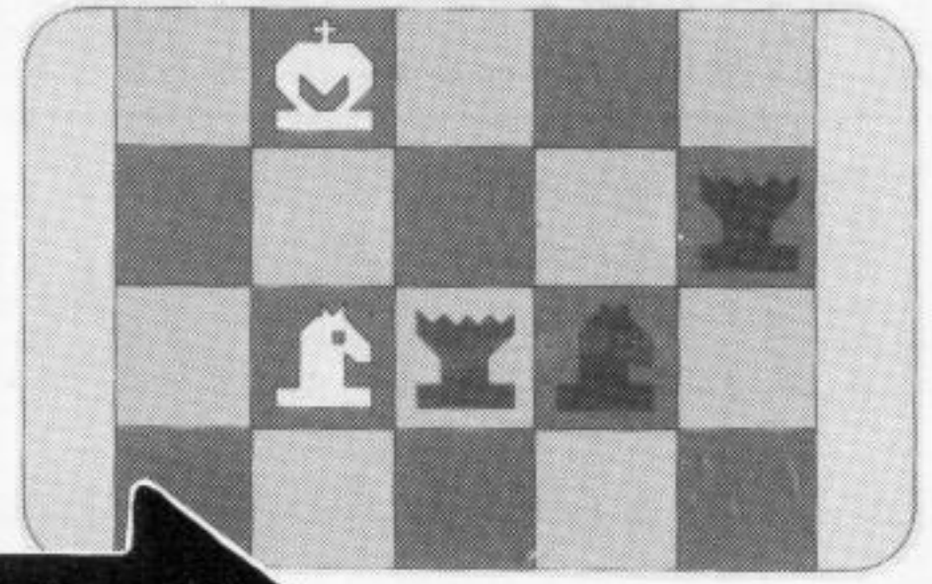
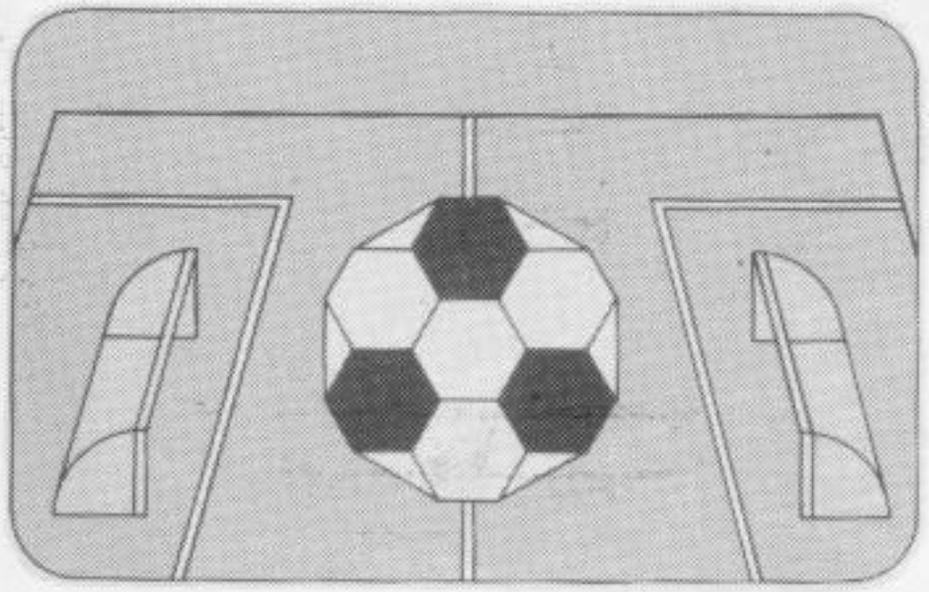
TEXAS INSTRUMENTS
SOFTWARE

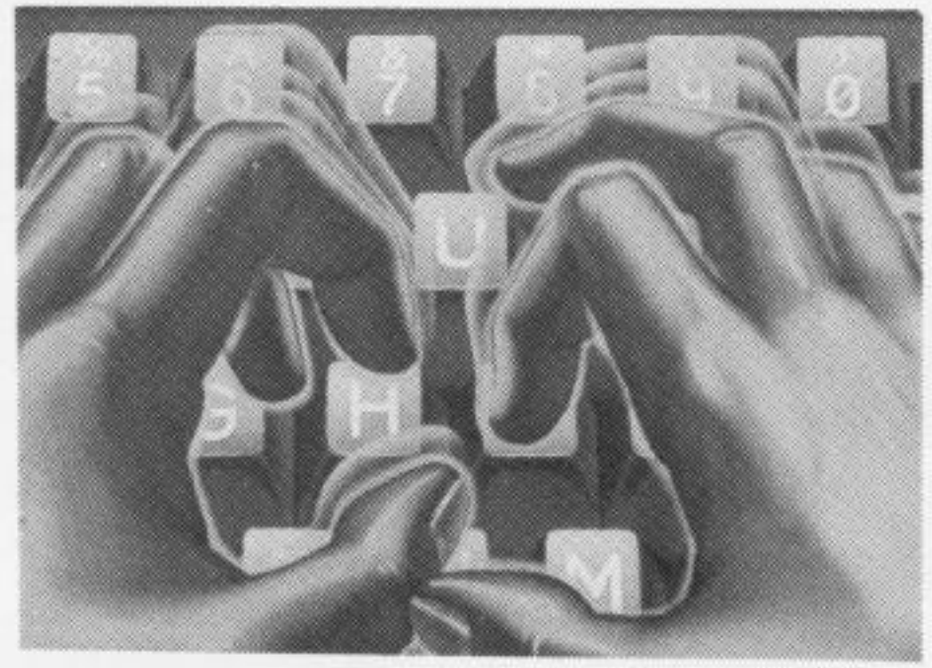




ATARI SOFTWARE FOR TI 99/4A

PICNIC PARANOIA	£18–
DONKEY KONG	£20–
DEFENDER	£18–
PAC-MAN	£18–
PROTECTOR II	£18–





SHARP MZ-700

Continued from page 31

compared to the average daisy wheel or dot matrix printer). You can cope quite well with the 711, though, as provision has been made for external tape decks and printers.

The keyboard, too, is a quite nice full-stroke type with the cursor keys arranged in the logical order (why can't more machines do this?). The keyboard has two modes: Alpha – which gives you letters and numbers – and Graph – which gives you a series of pre-defined graphic characters which are used quite extensively in the games software available.

The back panel is one of the better ones I've seen with provisions for joysticks, printer, tape deck expansion etc. (see chart).

One of the more unusual features about this micro is the fact that it has no built-in language so, upon turning on the machine, you are confronted with a blank micro that you can't do much with. The first thing you have to do is load in the basic tape that comes with the machine. Once this is loaded, the user only has just over 38K free to use. This may sound terrible for a 64K machine but then it is slighltly better than the user RAM in a Commodore 64.

Virtually all the games require BASIC to be loaded-in first. The number of fast machine code games is very small indeed. Nearly all the games use the keyboard graphics as well, making this one of the few computer systems that do this. After playing a number of these games I began to wonder if pixel graphics were possible on this micro.

On the positive side, the colours were nice and several fine semi-graphic adventures are available which are much more fun than many of the arcade-type games available. Maybe the relevant software houses should concentrate more on adventures than arcade games if the 700 series is hampered graphics-wise.

The Sharp 700 series seems to need an insertion of big name software from the likes of people like Atari or Parker. However, they are, for the moment, caught in a hardware/software vicious circle whereby the major software houses won't produce software for a machine that isn't popular and a machine won't become popular without software. One or other of them has to give if a machine is to take off as a games player.

The Sharp is a good micro for dads wanting to program or use a business machine, but also a machine that is capable of playing excellent adventure games and some not unreasonable arcade-style games as well. The 700 series still has a lot of potential which has yet to be explored. The software for the machine is still below Commmodore 64 standard but given time that hurdle can be overcome and more machine code games can be produced. BASIC is just too slow for a really good game. In short – good, but could do better, much better. □

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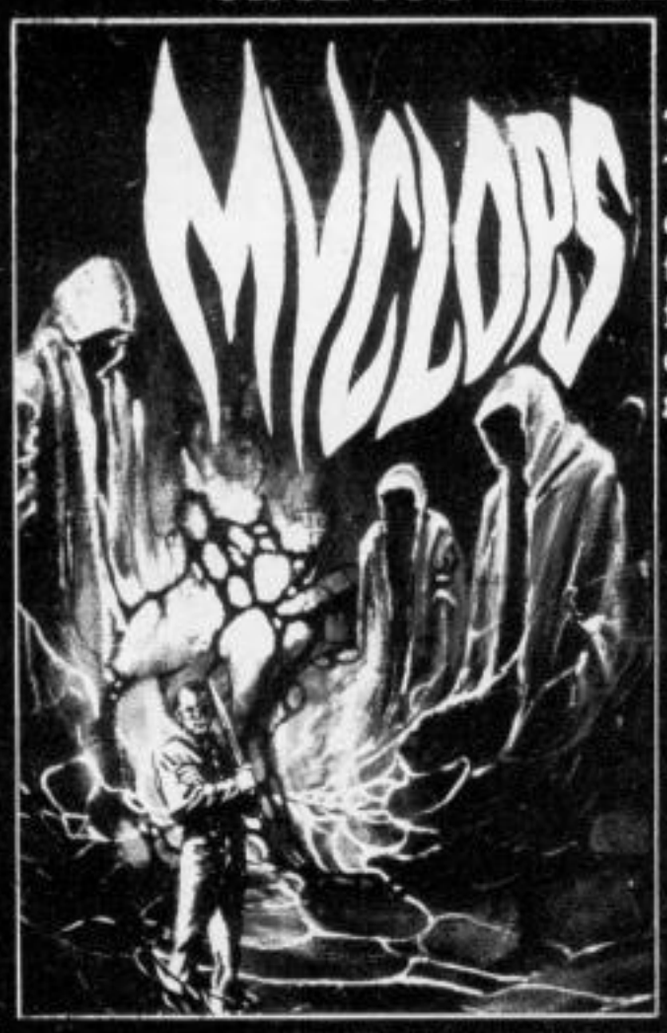

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TOP 20 videoGames

As monitored by *TV Gamer* readers

1	ZAXXON (CBS/Datasoft)
2	DONKEY KONG (CBS/Atari)
3	PITFALL (Activision)
4	RIVER RAID (Activision)
5	MANIC MINER (Bug-Byte)
6	Q*BERT (Parker)
7	POPEYE (Parker)
8	JET PAC (Ultimate)
9	POLE POSITION (Atari)
10	RAIDERS OF THE LOST ARK (Atari)
11	SUPER COBRA (Parker)
12	TURBO (CBS Electronics)
13	ENDURO (Activision)
14	BURGER-TIME (Mattel)
15	DONKEY KONG JR (CBS Electronics)
16	THE HOBBIT (Melbourne House)
17	DEFENDER (Atari)
18	SCRAMBLE (Milton Bradley)
19	HUNCHBACK (Ocean)
20	ATIC ATAC (Ultimate)

...and the TOP 10 arcade games

1	POLE POSITION (Atari/Namco)	6	BUCK ROGERS (Sega)
2	DRAGON'S LAIR (Cinematronics)	7	DEFENDER (Williams)
3	STAR WARS (Atari)	8	TURBO (Sega)
4	DONKEY KONG (Atari)	9	PAC-MAN (Bally/Midway)
5	ZAXXON (Sega)	10	M.A.C.H. 3 (Mylstar)

TOP GAMES OF THE MONTH

You are invited to vote for your favourite Video game (for VCS, Vectrex, Coleco, Intellivision, Philips etc), your favourite Computer game (for BBC, Spectrum, ZX81, Oric, Atari 400/600/800, TI-99, VIC 20, Dragon, Commodore 64 etc.) and your favourite Arcade game. But remember to vote only for those games that you own, have rented or have played a great deal.

To register your vote, fill in the reply paid card on this page. One lucky voter will receive a free year's subscription to *TV Gamer* (decided by draw). If the winner is already a subscriber, the free subscription will begin when the present one ends.

TV GAMER

DEFENDER

Dave Harvey has been busy making the earth a safe place for humanoids to live.

The first *Defender* Arcade machines were introduced to the world in the December of 1980. Created by Eugene Jarvis for Williams, they contained over 26 kilobytes of computer-coded information (the average machine contained about 19 kilobytes less). Jarvis later went on to create such games as *Stargate* (the *Defender* sequel) and *Robotron*.

In late '82, Atari introduced an adaptation of the arcade classic for their VCS console. Bob Pullaro, the programmer, had the task of fitting the 26K, five-button, one-lever arcade game into a 4K, one-joystick, one-button home version, which he reproduced quite faithfully. He then went on to create another version of the game for the Atari Home Computer series. This is the one that we are looking at here.

In *Defender* you control the dragster-like space ship, Defender, which appears at the left-hand side of the screen and travels along a horizontal landscape.

The object of the game is to protect the ten humanoids in the game from being abducted by the extra-terrestrial beings that hover about. But if your Defender does not defend adequately and all your humans get abducted, then the entire planet will be blown to shreds, the world will be totally dominated by aliens and it will be all your fault,

But fear not, after every fourth wave, you will get your world returned along with ten fresh humanoids. A game ends when Defender loses all his lives. He starts the game with three.

For your mission, you are given three trusty defences: lasers, smart bombs and hyperspace (more about these later). To thrust along the landscape, push the joystick in the direction in which you wish to travel.

To fire lasers, simply press the fire button on the joystick controller. A laser will destroy any alien or humanoid in its path and, fortunately, the laser cannon is inexhaustible, whereas smart bombs are limited. To detonate a

smart bomb, press the space bar on the keyboard of the computer. Smart bombs destroy any illegal alien on the screen and give a feeling of great satisfaction.

You are supplied with three smart bombs at the start of the game and are awarded another for each ten thousand points scored. Finally, hyperspace: the jump into hyperspace can be carried out by pressing any of the letter keys. Hyperspace will transport you from your present position to a random position somewhere in the galaxy.

Now on to the aliens. Their sole ambition in life is to gobble up all your humans, blast you out of the sky and blow the world to kingdom come.

SPECIFICATION

NAME: DEFENDER
SUPPLIER: ATARI
PRICE: £29.95
FORMAT: ATARI HCS, COMMODORE 64, TI 99/4A
RATING: Value 4
Graphics 4
Sound 3
Gameplay 4
Arcade 4

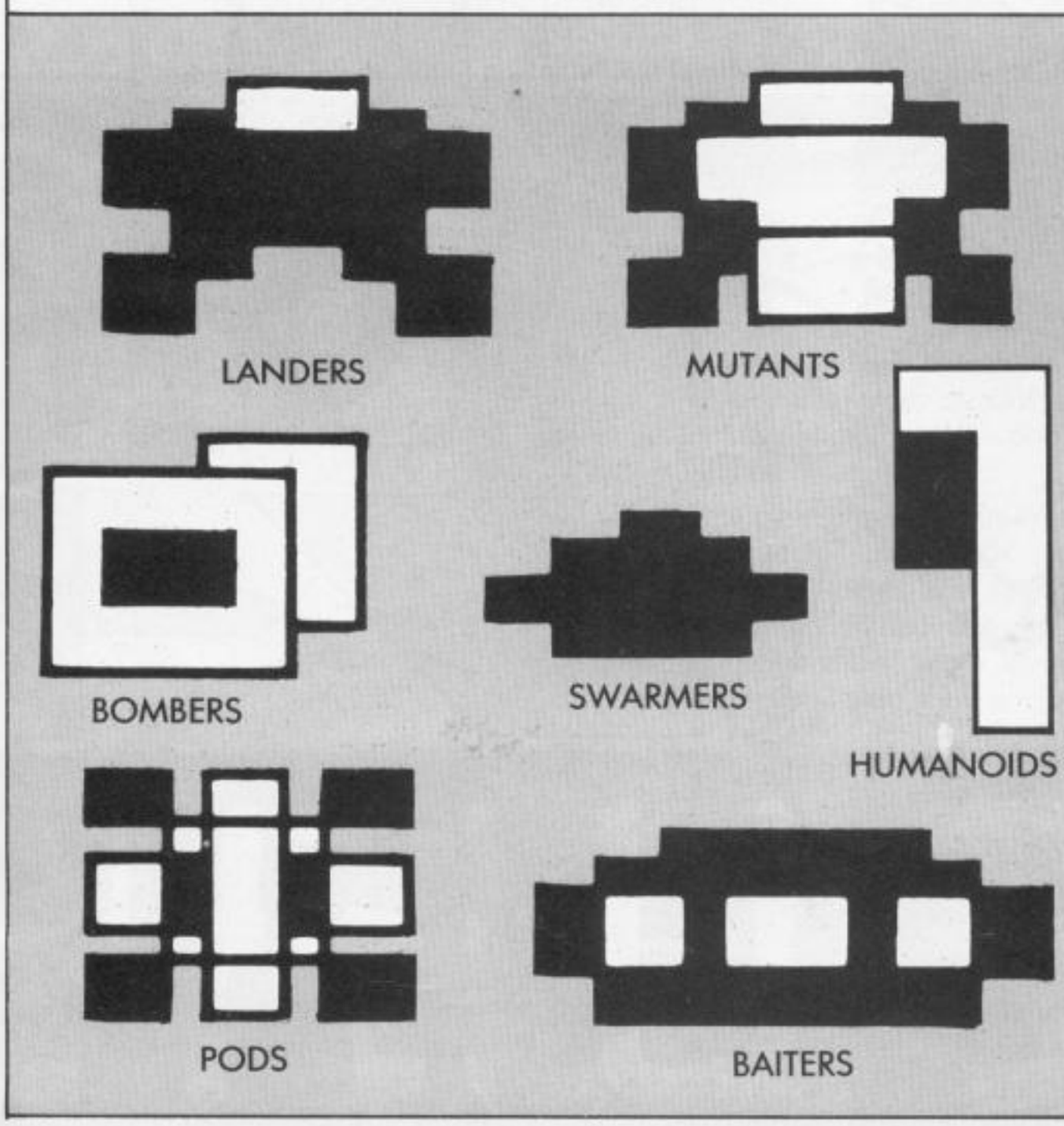
LANDERS AND MUTANTS

Landers look a bit like floating green bells. They hover around the lower portion of the screen generally causing havoc and getting in the player's way, firing now and again just to show who is boss. Sometimes, however, these aliens will get an attack of the munchies and what better cure is there than a nice tasty humanoid? The lander will make a rapid descent, latch onto a man, get a quick bit of target practice in if Defender is nearby and then ascend to the top of the screen, eating the man when he gets there. Thus making you one humanoid closer to the end of the world.

But it doesn't stop there! Once the lander has eaten the humanoid, it transforms into a super-deadly mutant. Mutants look pretty much the same as landers except for the visible humanoid in their stomachs. Mutants fly around looking as though they have just been plugged into the mains and have swallowed an electric toothbrush. They home in on the player's ship in an attempt either to shoot it or run into it and are not choosy. As long as you are dead they are happy.

Remember, when meeting mutants – confront with caution. And when the world is destroyed, all landers turn into mutants.

SCREEN BADDIES (and goodie!)



BAITERS

Baiters appear if you take too long to complete an attack wave. They, like mutants, home in on your ship and, unless you are an unusually good player, you will find yourself one ship nearer the end of the game. They look a bit like two-eyed green tin hats, but unfortunately are more dangerous and deadly. Baiters are the fastest and probably the most formidable aliens you will encounter so, as with the mutants, confront with caution – and bags of smart bombs.

PODS AND SWARMERS

Pods are the most innocuous aliens you will encounter in *Defender*. They don't shoot, they don't home in on you, and they don't sound like an ensemble of dentists drilling away. Pods were originally called mothership because, once shot, they release up to eight of their babies: the swarmers.

The swarmers are very tiny, red and yellow heat-seeking missiles,

Continued on page 64

Do you sometimes wonder where it all started? Who began the games from which today's home computer games emerged? *John Cobb*, veteran mainframe expert takes a nostalgic look at the days when a 64K computer cost several million pounds and fitted neatly into an aircraft hangar.

Jim leaned back from his seat by the computer console. The last nightshift routine had been successfully completed and he started to relax. It was 3.25am – an early finish but the stint ran until 8.00am when the day shift turned up.

"O.K. Gerry, how about a coffee?"

"I'm trying to give it up!"

"So you're just going to sit there all night?"

"You know something Jim? We've just about cleaned up *Adventure*. I've got 511 points now and almost a full map of the cave. That's only four points to maximum."

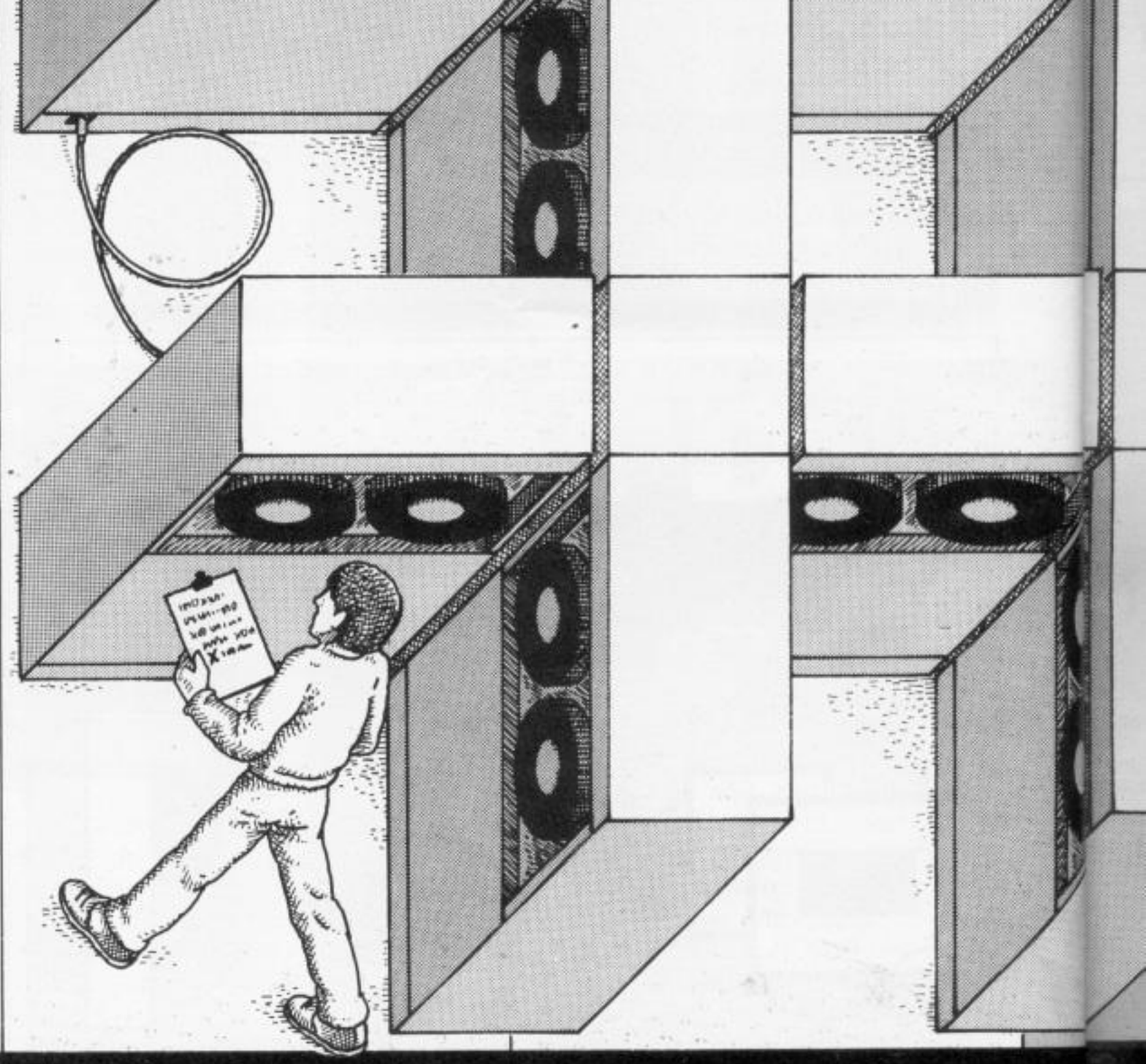
"Yeah, and you've been working at it for 2 weeks now, every night. By the way, did Ernie ever get back to you?"

"No not yet – I'll check my mailbox to see if anything has arrived."

Gerry strolled over to the computer console and keyed in a few commands. His mailbox collected messages from computers connected to a telephone network that was almost worldwide. Ernie was in Copenhagen and had promised more information on *Adventure*.

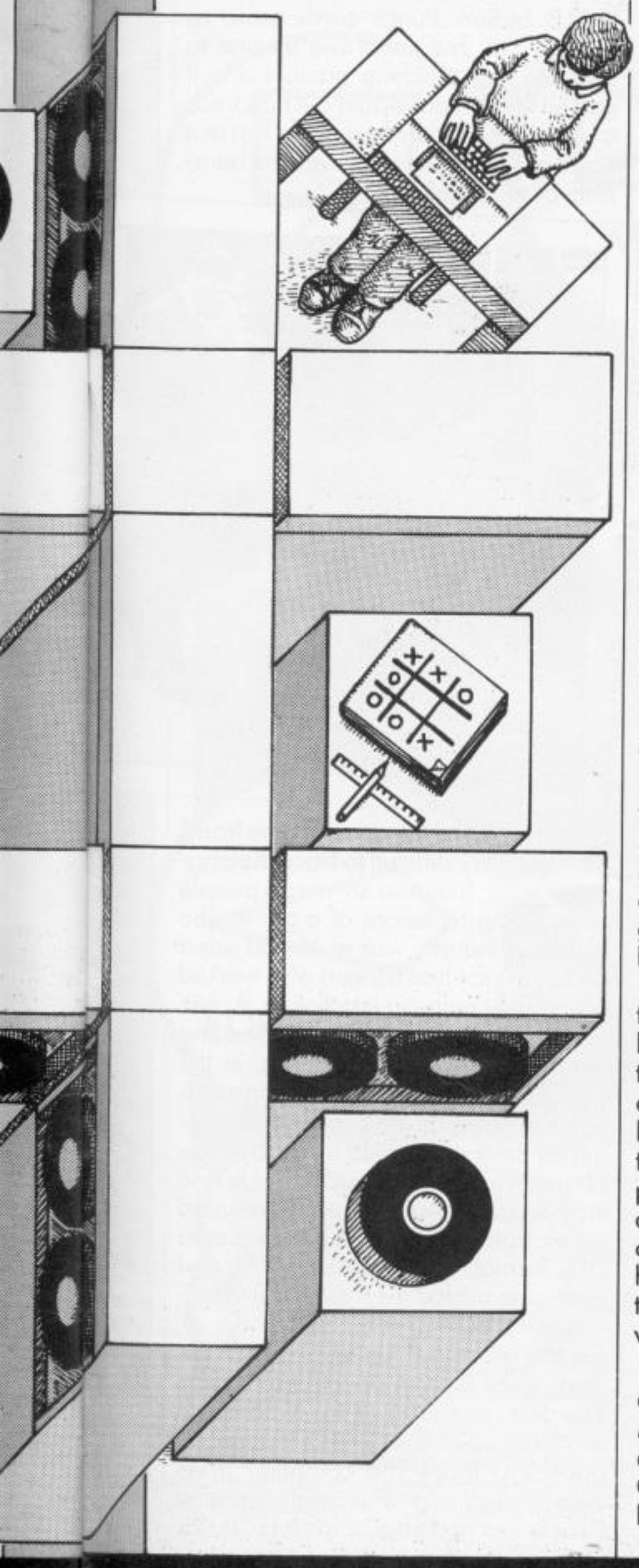
"Jim, it's here. Look, he's sent the full listings, including Willie Crowther's original version of 1975 from MIT. The latest version's really large – it's been extended all over the place and I reckon everyone's been adding their own bit. This is really going to keep us going..."

Adventure is typical of the games on mainframe computers. It was developed during 1975 by Willie Crowther at the Massachusetts Institute of Technology in Boston, USA, and spread from computer to computer



THE WAY

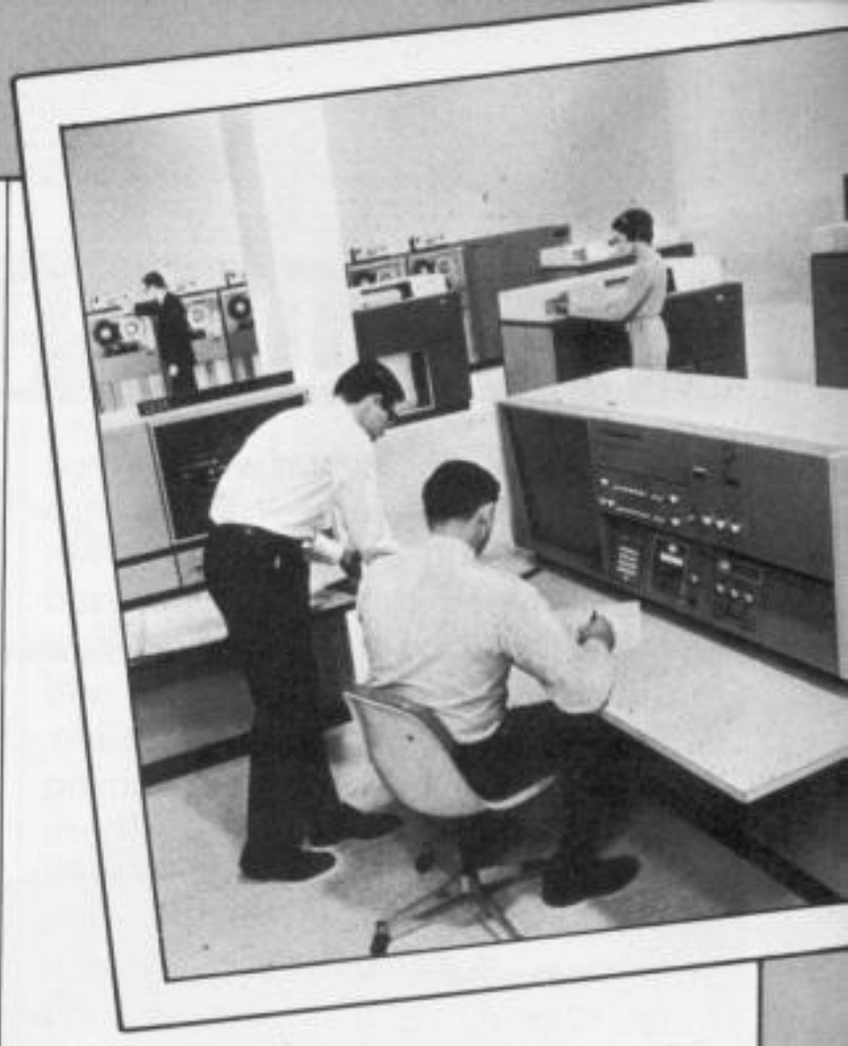
across the world. It has been modified and extended ever since by enthusiastic mainframe gamers. Compared with modern games on microcomputers, it is huge. The programs take up over half a million characters of storage and it needs a large machine to run on. It has spawned a series of related games such as *Dungeon* and *Zorc* which are even bigger. Games like this are now available on the micro-computer but in a different form. On the mainframe they are played by question and answer. Type in 'Move West' or 'Down Steps', and the computer types back the story as it unfolds. It develops as you play the game. On the micro today it can be joysticks for control, pictures that tell the story and quick responses that win the day.



Mainframe games are definitely 'intellectual' because of the way they work. After all they were born on the earliest computers with tiny storage capacity and speeds hardly exceeding the abacus. But they weren't called mainframes for nothing. They were enormous and took roomfuls of space and took megablobs of power. They cost the corporations that owned them millions of pounds and they were run day and night to justify their enormous price. It was computer operators that cared for them, working shift by shift, feeding the information and sorting output from the powerful printers. And while these simple-minded monsters (32K of RAM was a large mainframe) ran their programs – often for hours at a time – the night shift operator could get on with the important things in life by writing games.

That was the way things worked in the 1960's. No-one could afford to buy their own private computers at that time. Apart from a few enlightened colleges and universities most businesses had more serious ideas for them, so games were developed and played away from the prying eyes of company management. But every computer department worth its salt had a library of games available for those with the gaming spirit – and that was nearly all of us.

The first games were usually small and, by today's standards, trivial. *Noughts and Crosses* and *Hangman* always seemed to be around first. Computer operators were only just beginning to develop their programming skills and programs were rarely longer than a few hundred lines. Anyway, bigger programs wouldn't have fitted on those early computers. Remember that your modern 64K gaming micro is powerful compared with those early mainframes. In 1965 only governments could afford the biggest mainframes. 250K RAM was huge and was the exception rather than the rule. No programmer was allowed to use all the space available in a computer – it had to be shared with other users and other programs.



THE WAY WE WERE...

In most cases, the games were played on typewriter terminals – TV screens were still a thing of the future – with questions typed out onto paper and answers typed back. This meant that real action games with joysticks and instant responses were rarely possible.

By the end of the 1960's the gaming fraternity was well established. There were hundreds of games available if you knew who to contact through the grapevine. *Pokerdice* and *Pontoon* were already firm favourites and when you played *Shooter* you set the elevation and co-ordinates of your gun and tried to hit a target described by the computer. *Rally 360* was written soon afterwards and let you type in your setting – for the gear, accelerator or brakes – as you tackled complicated circuits of different levels of difficulty. This was shown at Olympia in 1972 by its author – Ray Bradshaw of IBM – and was later played on *Tomorrow's World* by Raymond Baxter, James Burke and Graham Hill (a visiting guest on the programme). Ray was a night shift operator at the time and this was his way of learning BASIC (BASIC in those days wasn't as easy as it is today).*Formula 1* and *Formula 2* followed soon afterwards to meet demand.

In 1971 an article was published in *Scientific American* by John Conway, a Cambridge mathematician. This described mathematically how populations of germs could grow or shrink when only limited food was available. It became a 'game' almost immediately and is still available on today's microcomputers in many forms and by many authors under the name of *Life*.

Every sort of idea was turned into a game. *Golf* typed out each hole showing the tee, trees, bunkers and green on a line of typing. The gamer had to choose his iron or driver and type in details of his shot and back came the result. After 18 holes (a pretty exhausting experience on a typewriter) a printed report showed everyone's performance and what handicap was most appropriate!

Gamers wanted more than question and answer sessions and the first games were written with real team interaction. These games needed very powerful computer processors and were usually developed on engineering and scientific specialist computers. A tank game for two players was available on an IBM 1130 computer as early as 1970. Two players each controlled a battle tank on a visual display screen. The tanks could move around the screen and could fire at each other. They had guns which could fire shells in straight lines and rockets which moved in curved trajectories. The keyboard controlled the movements of the tank, the elevator of the gun, when and what to fire and also the flightpath of the rocket once launched. It needed a great deal of skill and concentration to play well and proved very popular indeed, since it tested both strategy and speed of reaction in a similar way to today's games. Indeed, it was well ahead of its time and it took another 10 years before there were many other games of this type.

Fruity was a fruit machine game. The 4100 computer had a punch card device attached and toggle switches on the main console which could act as HOLD button. Punch cards acted as money. You fed them one by one to start the fruit machine gamble and if you hit the jackpot it paid out hundreds of punch cards punched out as fast as it could go. This always relieved the boredom of the night shift.

Where did all the games come from? It is often very difficult to trace the original author because so many people had different versions of a game. The computer industry was small and select and everyone had a friend who worked at another computer installation. At first, games were swapped by sending magnetic tapes around. Then, in the 1970's, the enormous telephone network started to link computers together and one could swap by telephone. It all became much quicker and incestuous. New skills were developed to recreate games from ICL format to DEC format; from Univac to IBM; and everyone added their own ideas, features and eccentricities as they did so. Games were for fun and were free. They were a form of self expression. You didn't create for profit – who would buy them when computers cost a million pounds a time? The computer press published games and printed programs. People got interested. Instead of building balsa wood models at home they 'built' games at work and at college. Some people have to be creative and constructive, and games proved to be a wonderful way to do it. It wasn't just fun, it was an inner driving force that made them do it. And they sowed the seeds that have now grown into today's flowers and fruits, *Pacman* and *Donkey Kong*, and all the excitement of what the future may bring. □

Games

This week's game comes by courtesy of Mr. Everson in Western Programming Services of Frome in Somerset. Says Mr. Everson:

"Fruity is supposed to simulate a fruit machine but this version has no calculations of percentage payouts or crooked fixing, etc., and was written before the revised laws altering the hold and draw facilities came into force (July '70).

The 4100 has six switches on the console and these are used to play the machine. Switches 1, 2 and 3 are used to 'hold' the fruits displayed on the previous spin if required. Switch 6 simulates the pulling arm and while it is on a counter clocks up some 'random' number. When switch 6 is released the least significant 9 bits of this counter are converted by means of a table held in store to three fruits giving the usual winning lines as well as a few mystery payouts.

The player pays for his game with special cards purchased from the "operator" and his winnings are punched out on similar cards when he has finished playing.

This was a simple program written for our amusement only and no doubt could be made far more sophisticated by the addition of some routines for calculating the frequency and size of the payouts."

A flowchart has been supplied and copies of it can be obtained by sending a stamped addressed envelope to *NewData*.

The console log from a typical game may look like this:—

```
LOAD CASH CARDS
                Load cards in reader (say 4)
CREDIT          4
COLLECT         NO
PLAY
                Put switch 6 on for any length of time
  PLUM          PLUM      ORANGE WINS NONE
CREDIT          3
COLLECT         NO
HOLD
                Put on switches 3 and 2
PLAY
                Put switch 6 on and off
  PLUM          PLUM      CHERRY WINS NONE
CREDIT          2
COLLECT         NO
PLAY
                Put switch 6 on and off
  CHERRY        ORANGE    BAR WINS 2
CREDIT          3
COLLECT         NO
PLAY
                Put switch 6 on and off
  BAR           BAR       BAR WINS 10
CREDIT          12
COLLECT         YES
                12 cards emerge from the card punch!!
```

NewData, December 15, 1970

Christopher McDonnell looks at *TV Gamers'* top arcade bombing raid game now translated for the home.

Although *Scramble* did not do too well in the arcades, it translated rather nicely onto the Vectrex machine. The idea of the game is to fly your ship over various terrains, shooting and bombing enemy targets along the way, to reach and destroy the enemy HQ.

The controls in the game are quite simple, but the stubby Vectrex joystick can make manipulating the ship difficult. *Scramble* can be played with one or two players using the built-in joystick.

When the *Scramble* cart is inserted and the Vectrex switched on, a logo appears. Many people may not know that a software program will not load into the Vectrex's ROM unless this logo appears, so third-party software companies would have to program this symbol onto the cart for the game to function. Of course, to copy a company logo without authorisaton could breach copyright and now that the system has been suspended by MB Games it seems unlikely that there will ever be third-party games.

Now back to the game. Well, once you get by the logo and the title

SCRAMBLE

SPECIFICATION

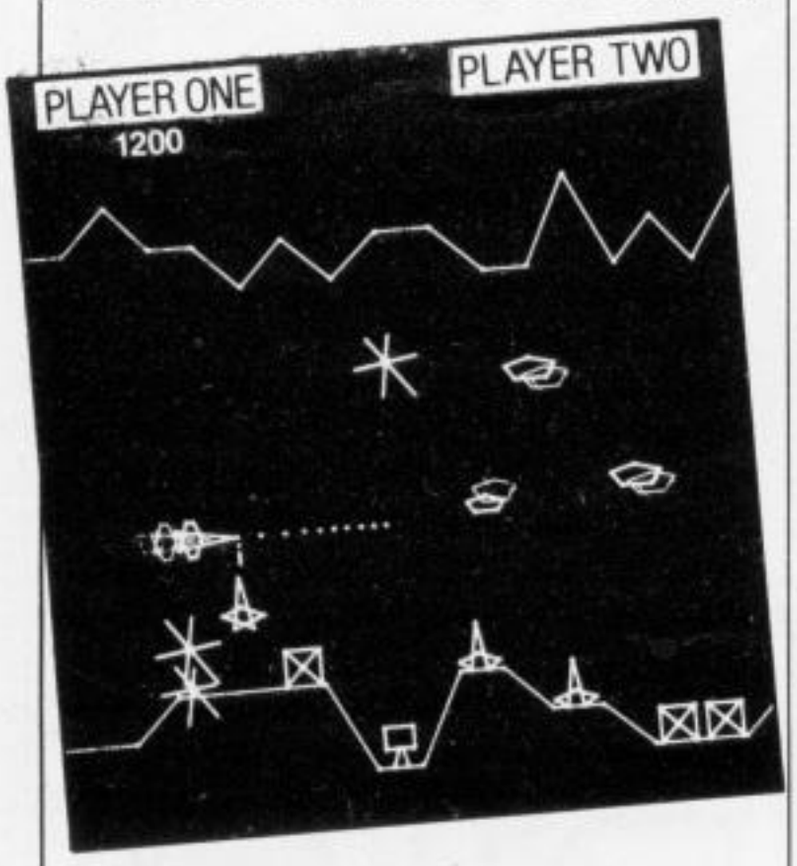
NAME: SCRAMBLE
SUPPLIER: VECTREX
PRICE: £19.95
FORMAT: VECTREX
RATING: Value 4
Graphics 3
Sound 2
Gameplay 4
Arcade 3

Continued from page 57

page with the *Scramble* theme tune, the game proceeds onto the six different phases of play.

PHASE 1

You fly over a mountainous terrain. Your fuel gauge is constantly dropping. Missiles are launched when your ship passes over them. Tucked in on the leeward sides of the mountains are fuel tanks and other targets which can only be zapped by dropping bombs which follow sloping



trajectories parallel to the mountain sides. Always stay close to the ground if possible, and move with the contours of the land. If your ship is too high, your bombs will have to travel further and will therefore take longer to hit targets. As only two bombs can be in the air at the same time, this will reduce your hit rate. Keep hitting the bomb button and always aim for fuel tanks to replenish your fuel supply. In game selections 2 and 3 you will have to take great care in flying, because the enemy missiles will guide toward you and your fuel consumption is very fast.

PHASE 2

You enter a cavern patrolled by UFOs. One safe method of attack is to hover above the ground (UFOs are less likely to attack while the *Scramble* craft is stationary) and gain points for bombing obstacles. But watch the cavern roof! Though you can use this tactic it's not the best one, especially when you enter Phase 3. Another way which will give you more points *and* safety is to patrol the base of the cavern, bombarding installations. When you travel towards a mountain peak guarded by UFOs, thrust your ship forwards. When you've reached the peak, pull the joystick toward the left (hover) and wait for your chance to jump the peak. This system will have to be used in game selections 2 and 3, where fuel consumption is fast, because then you will have a fuel dump just where you want it.

PHASE 3

You come face to face with "Flamoids". If you are skillful you can dodge them (you can't shoot Flamoids). Otherwise, stay close to the ground (remember Phase 1) taking out fuel tanks and other stationary objects. To get over peaks, thrust the ship forward then, when it's clear, hop over the mountain peak. If you can watch the terrain you will see that it is repeated twice. Once this has happened, thrust the ship forward. Then push the joystick to the top left corner to get over the city wall. Take care in games 2 and 3 as the Flamoids' speed is very fast.

PHASE 4

You fly over the city wall in which missile silos are planted. The wall is high so don't drop your altitude too much. Watch the silos as you fly your ship over them. When a missile launches, pull back quickly and shoot the missile. Some missiles can't be shot becuase the silos are too deep, but don't worry. Try to shoot or bomb as many as you can to bump up your score. As you approach the end of the wall thrust the ship forward, then down and left to tackle the maze.

PHASE 5

you have to pass the maze. This is another chance to fuel your ship up. Shoot the first few fuel tanks then thrust forward. Pull the joystick diagonally down-left. Then try to get behind the fuel tanks to shoot and then clear your path. Repeat this throughout the maze until you come to the last phase. In game 3 the maze is much more of a challenge because the play is speeded up.

PHASE 6 – THE HQ

This is the final part of the game. Fly over the city. When you get to the highest building, thrust forward. Then move the joystick down-left to follow down the side of the building. As you fly over the smaller building in front of the HQ, keep dropping bombs. Then when you fly past the building you should hit the HQ.

Well, that's the 6 phases. The *Scramble* theme tune then plays and you repeat the process on a higher level. The game itself is quite addictive. Some of the graphics and sounds are great too. *Scramble* is challenging and hard to beat. The highest score I have obtained is 79110 in 5 months of trying. □

The Demise of Vectrex

Although Vectrex games have often been hailed as the truest to the arcade versions, sadly MB games, the UK distributor, has announced that there will now be no new cartridges in the system. The eighteen or so games available, including *Scramble*, mark the last of this unique vector-scan graphic system. Readers are recommended to look out for a Vectrex system going cheaply – it could be worth getting.

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Welcome to May's Club News! Well, spring has sprung and as usual a wondrous batch of letters, queries, hi-scores and, of course, those Easter Eggs and Bugs have flooded into our office at *TV Gamer* HQ.

As always, many thanks to all of you who have written in over the past few months with your comments on the magazine. We do read 'em all (even the nasty ones!). Don't be disappointed if your letter doesn't appear in the issue directly after you send it in – we work months ahead and are only now getting through February's and March's batch of letters. On the subject of letters, much as I'd like to, I can't answer letters individually – sorry.

Now on to lighter subjects. Isn't it nice to see big names in gaming bringing out games for other people's micros? You never know, Sinclair may bring out *Jet Pac* for the Colecovision! Write and let me know what you think of the current games scene. Perhaps you could give some of the big companies some pointers in the right direction – after all, it's you they're trying to please. Don't forget to send us all your hi-scores, eggs, queries etc at the above address.

By the way, we are still looking for reviewers for home computer systems. There's a form on page 66 for would-be reviewers to fill in – this could be useful source of new games for any avid gamer!

Which car cartridge?

I would like to ask your advice. I am 13 years old and the proud owner of an Atari VCS. I have saved up enough money to buy an Atari cartridge and am writing to ask you which cartridge you think is better – *Pole Position* or *Enduro*. Your decision will make a big difference as to which cartridge I buy.

PAUL WHEELER, Ramsgate

If you go for graphics then get *Enduro*; if you go for gameplay then get *Pole Position*. *DW*

VCS adapterless

I was wondering if you could get an expansion module to play Colecovision games on the Atari VCS, and can you purchase a typewriter keyboard to fit on the Atari VCS to turn it into a home computer?

STUART THOMSON, Westwood

There's no chance of there being a Coleco module for the VCS as the adapter would have more electronics in it than the VCS itself. The only computer adapter available is by Spectra, called Compumate. However, this accessory actually downgrades your VCS so I wouldn't suggest obtaining one. *DW*

Club league

In the last issue you had a piece on video game clubs. I am a member of quite a few clubs including Atari, Parker, Silica Shop and Greens of Debenhams. These are my views of each:

ATARI: I have been a member for about 9 months. Since then I have only had two newsletters, one of which was advertising the 1983 Atari "Player of the Year". The thing which annoyed me was, I had received the newsletter AFTER the entry closing date. I didn't want to enter, luckily! On the other hand I must say I do enjoy reading the newsletters which are very interesting and informative – I only wish they could be published more often.

Out of 10: 6.5

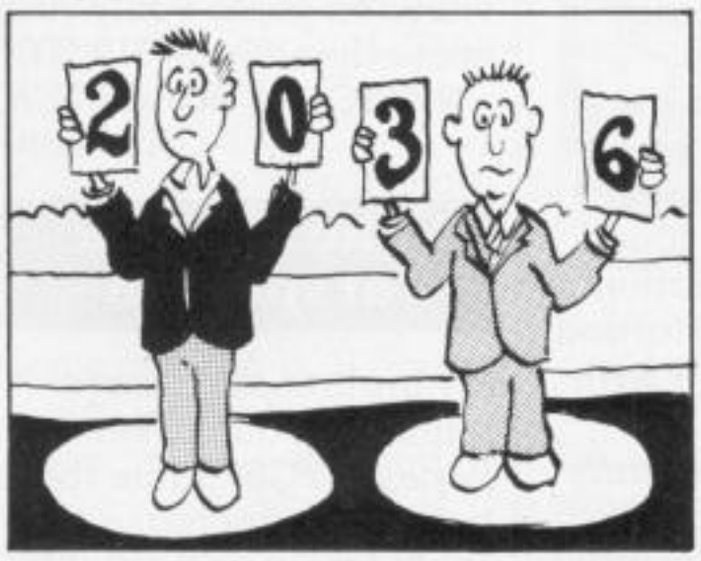
PARKER: I think Parker video games are among the best available for the Atari VCS. I just wish their club was as good. I sent off a coupon to join the club and 6 weeks, yes 6 weeks, later I received my first newsletter which was quite good in fact. Since then about 5 months have passed and I still haven't got a second one.

Out of 10: 5 (Sorry, Parker)

SILICA SHOP: My favourite of the bunch. I have found them to be

very fast to reply and send out information etc. Also, they don't mind making sure we (the members) get the information – I have received no less than four copies of the same catalogue. Well done lads and lasses! Keep it up! *Out of 10: 8*

GREENS: Another winner. They also deal with computers and computer software, but their video games sections prove to be very good indeed. *Out of 10: 7*



I tend to go for "free" clubs. I don't see any point in paying a few quid just for a fancy library case etc. But I might pay Parker to speed up the mail service.

Another question for you. Recently I sold my Atari VCS to a friend. Will it be possible for him to take over my membership number? Also, I upgraded to a Colecovision and along with it I have the expansion module No. 1, the Atari adapter. Will I be able to join the Atari club again, if I send off the serial number underneath?

CHRIS SHORT, Tewkesbury

Your friend can reapply with no problems. Just use the same serial number. As for you, I'd keep quiet about your expansion module as Atari still frown upon them. You'd also better hope that no-one at the Atari Owners Club reads this mag!

Marathon Kong

A few lines about the CBS system and its game. It has to be the best – certainly as good as anything else I have been able to try. I think I know why not very many "eggs" have been discovered (at least on *Don K* and *Turbo*).

My high score on *Don K* using standard joysticks (jeez, they're awful!), currently stands at 2,035,200: I was on a 29,000 bonus and it took me 1½ hours (130 screens). On *Turbo*, my high score stands at 1,000,000 plus – I gave up then – and it took a marathon 4½ hours. My point is, both these scores were on level one so I think it can safely be said that nothing will happen unexpectedly at this level by way of a high score!

Some small points on *Turbo*. After bonus, keep in top gear (2nd), flat out ... You'll go through a few cars – and your engine noise is deeper (turbo cut-in perhaps!!). Old hat, I know, but I said they were small!

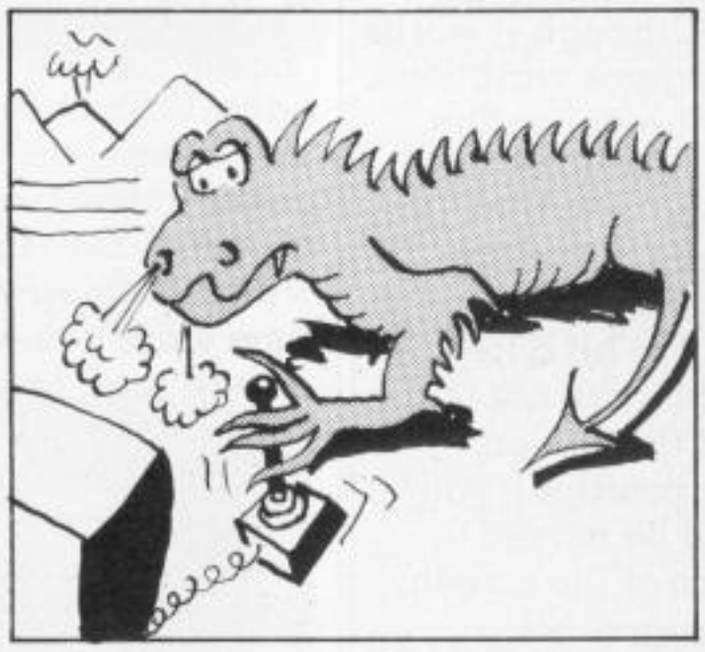
DANE CLARKE, Biddulph

Stick for the Dragon

I've just bought a Dragon 32 computer and I notice that you haven't reviewed any games for this system. By the way, aren't the Dragon joysticks awful! I can't get very good response from them at all. They aren't as good as my old VCS joysticks.

BILL FARMER, Basingstoke

Actually, we have now started to include some dragon games in our New Games Section. I agree about the joysticks – they aren't very responsive. But fear not – the solution is at hand. There is a very

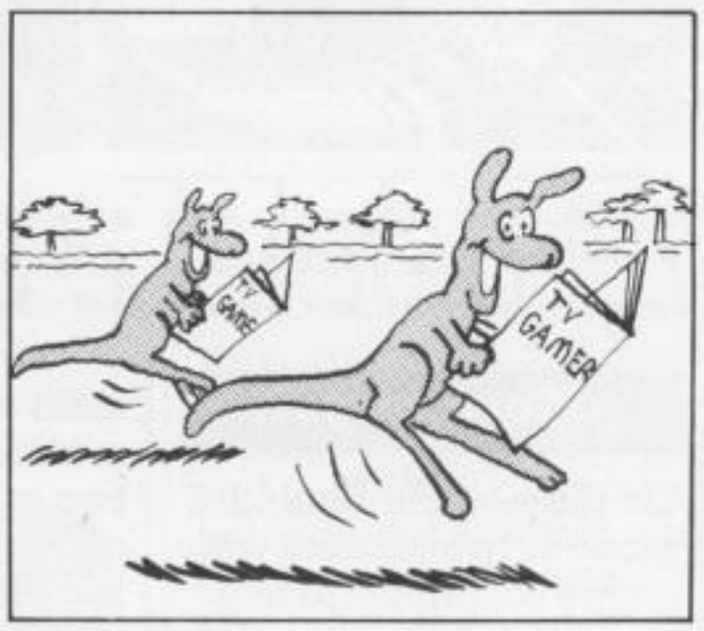


neat gadget available which enables joysticks to be adapted for the Dragon – it's called Dragon Tamer and costs a few pounds from Mr. Micro. So don't throw your old ones away! *DW*

News from down under

TV Gamer's second issue is on the local newstands here in Australia and is as informative as the first.

We bought Intellivision in preference to other systems because of the family orientation of that system. The spectacle of our youngsters playing hour after hour of kill-or-be-killed space fantasy games did not appeal to us. The children, both girls, aged 4 and 8 enjoy the "cute" games like *Frog Bog*, *Happy Trails* and *Shark, Shark*, but they also play a few of the shooting games as well, like *Astrosmash*, *Triple Action* etc. My wife and I play *Tennis*, *Lady Bug*, *Bowline* and *Pifall*, mostly.



Your advice in the autumn issue under the heading "Will it work?" is probably correct as far as Atari VCS/2600 cartridges are concerned. We buy most of our Intellivision software from the US and have never had any trouble at all. The local TV system is PAL-b which is compatible with the UK. However, the ROM chips in the Intellivision cartridges do not effect the video output as do many Atari cartridges.

In closing, we'd like to share an unusual experience with your readers. Whilst playing the *Golf* game, the screen went blank as though the game had been paused by the 1-9 or 3-7 buttons function. A few seconds of frantic button pushing brought about a hitherto unseen graphic. Against a solid black background appeared, in very large stylised script, the words "Mattel Electronics" in light brown. Below this in smaller but fairly large brown lettering was "Copyright 1984". Yes it really said 1984! Perhaps just a designer's little joke. Do any of your readers have similar discoveries in Intellivision games?

PAUL DAVIS and FAMILY, Australia

There is truth in what you say. Intellivision and Colecovision cartridges work in any country. It's only the hardware that needs modification. As for other systems (especially home computer systems), we're not altogether sure. We do, however, know that VCS carts from abroad definitely don't work over here (or in Australia for that matter). *DW*

EASTER-EGGS

More bugs?

On playing the *Defender* game 1, two landers were on the scanner and one picked up a humanoid. I shot it and let the humanoid fall freely, but it was destroyed. A mutant should have come but nothing appeared on the scanner and I flew over the city but saw nothing. This was on wave 2.

Also, I shot the last lander and expected the wave number to come up but it didn't. I flew the ship over the city for about 5 seconds and then the wave number came up.

On *Asteroids* game 1, there were 2 big asteroids on the screen and they went to the bottom right-hand of the screen and got stuck there. I had to thrust down and shoot them.

JEREMY GARNHAM,
Saxmundham

Anyone else seen this? *DW*

Helicopter rescue

I have got two "Easter Eggs" for you. They are in the games *Dream Flight* by Goliath for Atari VCS, and *Miner 2049er* by Tiger Vision, also for the VCS.

In *Dream Flight*, on the balloon section, after turning the balloons into ugly faces, you can climb up any pole, disappear off the top of it and reappear in the helicopter.

In *Miner 2049er*, if you reset a game while in the middle of another one, two miners will appear at the bottom as usual but then disappear. One will return and sink into the floor.

STEVEN PARKIN,
New Okerton

Downhill "cheating"

I have discovered a way of cheating on the Activision cartridge, *Skiing*. Although it works on all ten game variations, it is only useful on the downhill versions (5-10).

The idea is to flick the left or right difficulty switch up/down when you are about to hit a tree. As long as you are not in the centre of the screen (starting position), your skier will be moved to the centre of the screen.

It's a bit like a "hyper-space". It helps if you get a friend to flick the switch when you shout!

Naturally, this method is not foolproof. If there is a tree in the centre of the screen when you hyperspace you will crash, but usually you are okay.

I have also found a variation on *Vanguard* in which the energy pot things at the bottom (which make you indestructible if you touch them) do not move along with the scenery. Instead they move apparently normally and then suddenly stop and get left behind by the scrolling scenery! This makes them very easy to touch.

I found this variation quite by chance. I turned on my Atari loaded with *Vanguard* and on the screen were these funny white shapes, two of which drifted to the left. I pressed game reset and there it was.

LOIC ROBERTSON,
Beckenham

Tunes of glory

I have discovered an "Easter Egg" in the Coleco game of *Time Pilot*. On player one of a two-play game, if you can shoot all the planes in 1910 without losing your first time ship, you will hear a short tune before you pass on to 1940. If you shoot all the planes in 1940 with the same time ship before passing on to 1970, you will hear another tune but longer. I have also discovered a bug in Coleco's *Looping*. When you get into the end room you can pass through part of the framework without crashing, also you can make the victory tune sound by touching the inside upper framework, nearest the end vertical line. It will also work by just pulling up to the line but not quite touching it.

ROBERT McKEEVER,
Hemel Hempstead

Smurf initials

I have found a way to make initials appear in *Smurf Rescue in Gargamel's Castle*. On skill level 3 just go backwards and forwards between the screens seventeen times whenever the background changes. Your score will read zero and the initials "AU" will appear where the number of Smurfs remaining were. This also works on game 4 only your score then reads 919,500.

NICHOLAS SCHOUTEN,
Australia

The miracle of spinach

My brother and I have found that on Parker's *Popeye* (VCS) game there is a way to increase your score by around 110,000. In round 1 you first catch eight hearts (with your first life), then get

destroyed. When your second Popeye starts, the score at the top of the screen goes away for a moment to show you how many Popeyes are left. With your second Popeye go straight away and eat the spinach and punch Bluto who will be walking towards you. When the score replaces the number of Popeyes, you will find it has suddenly increased by around 110,000.

KERR S. CLARKSON,
Saltcoats

Carnival kitchen

I am writing in response to a letter from Martin Allcock who claimed that after 100,000 on the game *Carnival* for VCS, the programmer's name appeared. I have reached

the score of 100,000 and the score changed to the name of "S. Kitchen".

Also I would like to know if the arcade game *Balloon Bomber* is going to be made into a cartridge for VCS?

ALEX GADD, Wanstead

S. Kitchen (the name of the programmer, Steve Kitchen) does indeed appear in *Carnival*. Steve used to work for Coleco before he joined Activision (where he conceived and designed the game *Space Shuttle*). In addition to *Carnival*, Steve also did VCS *Donkey Kong*. I recently phoned Steve in the States and spoke to him about this, among other things (a full interview with him will appear in the next issue, look out for it!). He told me to congratulate you on your find and that there is an egg of sorts in *Space Shuttle* – more about that next issue.

As for *Balloon Bomber*, I'm afraid there's no news. *DW*

How to get Clark Kent to the Daily Planet

After pressing 'game reset' bring Superman down into the phone booth to change into Clark Kent. Then walk approximately half way across the screen and stop. Now press the 'game select' switch and wait until the screen changes to the scene where Clark Kent seems to be over a subway entrance. (Clark Kent must be directly over the subway entrance so you may find you have to position Clark Kent exactly. Try it a few times as I have to sometimes.) Now move Clark Kent left, you have now entered the yellow section of the

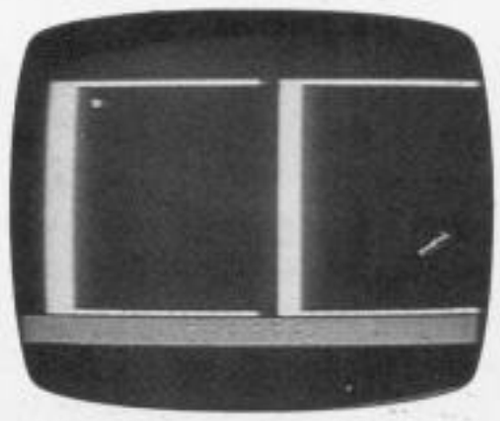
subway. Keep moving left and leave the subway. You should now be at the Daily Planet. From the time you press the 'game select' switch to the time you start to move Clark Kent, the timer is stopped. This method will work with either difficulty switch in A or B.

DAVE BARRY, Tottenham

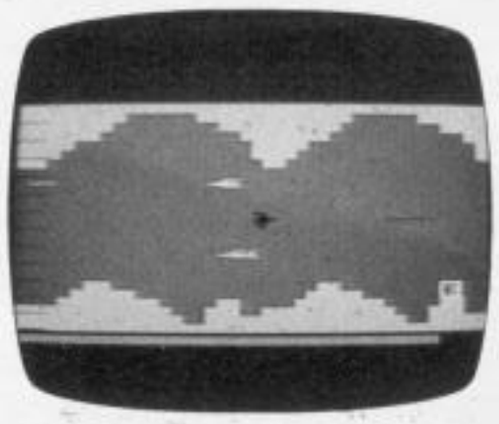
Raiders champ

After completing *Raiders of the Lost Ark*, I found I had seven dots at the bottom of the screen. I've enclosed a picture for you to see. Does my

second picture show the "Lost Room"? The snake travels down both sides of the screen. Indy was attacked by a snake but didn't lose a life. He just became a white square that couldn't be moved.



The next picture shows a screen from *Vanguard*. I bet you've never seen this before – my ship has turned black! You sometimes get the numbers



1126 floating around on this screen.

DAVE BARRY, Tottenham

Congratulations! The pedestal on which your Indy is standing has 24 tiers. Maximum points is 25, when you get a special easter egg. Anyone found it yet? No, that funny screen isn't the Lost Room of Tanus, it's some kind of bug. We show a small sketch of the Lost Room in the map of Dave Harvey's article on *Raiders* in this issue. Another bug is your black *Vanguard* ship. Where are you getting all these from? *DW*

Mystery on the horizon

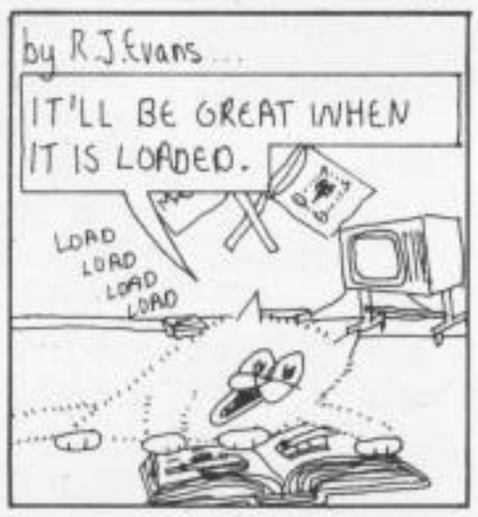
After reading Darrin Williamson's item on "Easter Eggs" in the Winter issue, I noticed some strange stylised structures which appear in the Activision *Robotank* on the skyline of the battlefield from time to time. I can't guess what factors in pay govern their appearance, although they tend to appear suddenly during Phase 1 of the game and remain on screen throughout play (and as silhouettes in night-time scenes). By the way, my husband and our friends find the game particularly excellent, and the changing weather patterns and scenario add excitement and tension. This is by far the most enjoyable Atari game we have played.

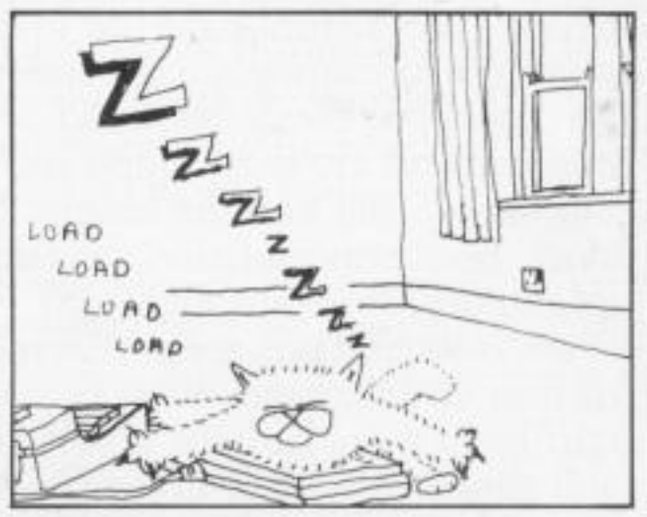
ANNE STOREY, Grimsby

Secret initials and more...

While playing Yars Revenge I discovered how to get secret initials on the screen. When the Qotile turns into a swirl you must blast the swirl in midflight using the Zorlon Cannon. When the screen is flashing a black line appears on the screen. You must fly onto this line, you may have to do it a few times before the initials appear on the screen. Once when I was playing Raiders of the Lost Ark I was in the Black Market and a Yellow Yar flew across the screen. Another time I was in the Mesa Field and the Mesa's disappeared. The screen turned green and I fell into the Valley of Poison.

MARK STUART, Invernessshire, Scotland





DEFENDER

Continued from page 53

which are extremely elusive and annoying. Unless you are an exceptionally good player, swarmers should be eliminated by smart-bombs.

BOMBERS

Bombers are not as easy to pick off as pods but a damn sight easier than mutants or baiters. A bomber is a set of three flashing squares, each of different colours. As it travels through space it leave a string of X-shaped mines behind it for the player to run into. Bombers pose no great threat to Defender. In addition to Defender's weapons, he has a scanner to help him out. The scanner is positioned at the top centre of the screen and shows Defender what is happening in other parts of the galaxy, off the main screen. On this radar your ship appears as a white diamond and aliens as blips. Shots and mines don't show up.

If a lander grabs a man, the man will give out a cry and then Defender must rush to the scene of the crime to stop the lander before it eats the man and mutates. When Defender gets there, it must shoot the abductor and either catch the man and return him to earth or, if the man is dropped from a low altitude, let him drop to safety.

SCORING AND STRATEGY

Your primary objective is to shoot the landers before they eat your humanoids and destroy the world, a thing which no gamer would wish upon anyone. At the start of a wave, check your scanner for the largest bunch of landers you can find and go directly to them, shooting a few odd ones on the way. Once you get there, stop the landers before they start their banquet and transform into marauding mutants.

Mutants and baiters are not really as bad as they seem as long as you can keep them at your level – you will almost always be able to destroy them. It's when they are above or below you, that the problems occur. Believe it or not, it is possible to shake off a baiter, but this can only be done once or twice (supposedly the baiter gets wise to your tricks). To do this, wiggle the joystick violently when the baiter is in pursuit of your ship and then speed off in the opposite direction to which the baiter is travelling. This buys you time to work out how you are going to dispose of him (this we'll leave to you!). Of course, you could opt for hyperspace, but remember only about half of the time will you return from hyperspace intact.

Pods are the easiest aliens to deal with – anyone who is capable of pressing the fire button is capable of destroying a pod. But the main concern here is not the pods, but what they release: the swarmers. Those tiny little aliens who are as slippery as soap. A good way to deal with these is to shoot the pod and then immediately smart-bomb the swarmers before they take a liking to your ship. Smart-bombing a pod is okay but will not always nab the swarmers as well.

SCORING

Landers	150 points
Mutants	150 points
Swarmers	150 points
Baiters	200 points
Bombers	250 points
Pods	1000 points

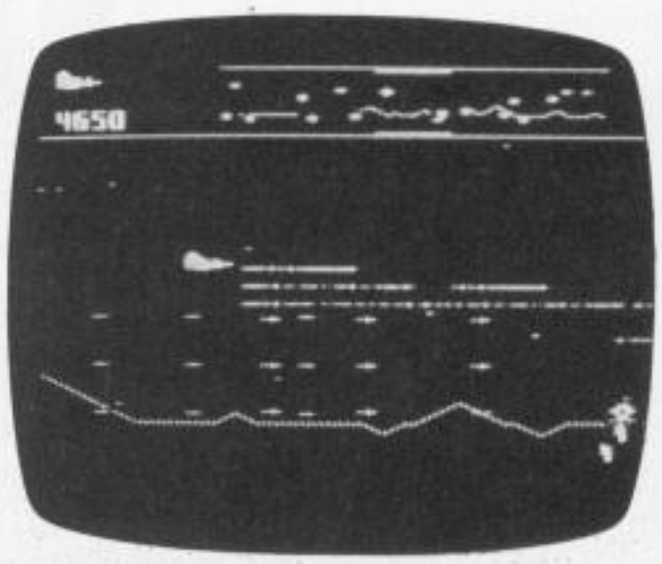
Defender destroyed gets you 25 points each life

Humanoid rescue mission:

Humanoid falls and lives	250 points
Humanoid caught but not returned	500 points
Humanoid caught and returned	1000 points

Finally, we have the bombers. Just a simple strategy is needed for handling these. Always fire at them when they are approaching. Bombers leave their mines behind them, so by dealing with them in this way you will not run into their deadly traps.

Now for something completely different. It is not a very well known fact that on computer *Defender* there is a safety zone – a place you can go to where mutants and baiters will just fly past your ship instead of trying to fly inside it. This place is



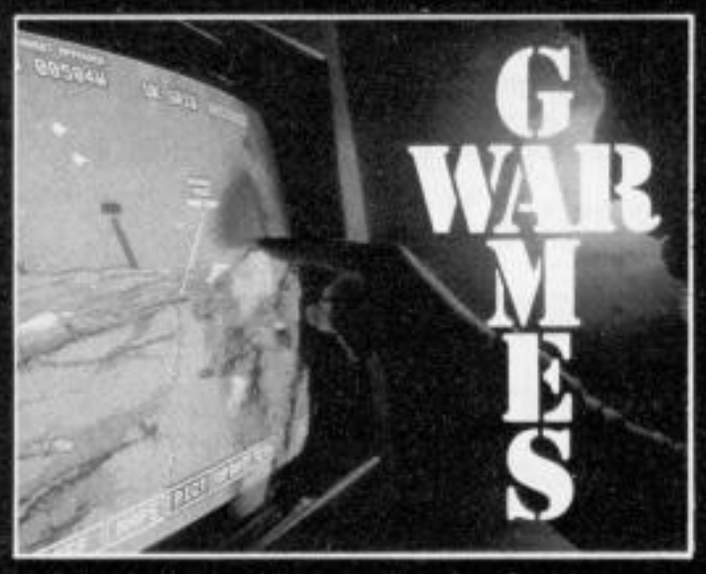
Action in Defender.

called the "international date line" or "reverse line". Before the start of a game look at the scanner for the biggest rock you can see. This you may find difficult as the rock in question is only a tiny bit bigger than other large rocks. If so, then look at the scanner for two largish rocks adjacent to each other (if you cannot find these you must be playing *Pac-man*). Once you have located these rocks, look left and stop when you come to the next very large rock. By standing at the right or left of this rock (on the main screen), any mutant or baiter that you meet will simply fly past your ship. These beasts will still shoot, but nevertheless this is a helpful piece of strategy to keep in mind. Of course, it's not quite so helpful if your world has blown up. The line will still be there but, without the world, it will be downright hard to locate.

Downright hard is definitely the key phrase to describe this game. But the phrase to describe the translation from arcade to home and the overall very enthralling game-play is: downright good!

This is one of the best adaptations you are every likely to find for your Atari home computer and Bob Pullaro, the man behind the mutants and all the other aliens deserves another mention for this great feat; award this man one hundred smart-bombs! □

GAMES GOVERNMENTS PLAY



Continued from page 44

the point indicated and the picture will be altered to show satellite images. Just another touch and these images can be filtered to enable analysis. Touch the screen again and a detailed map is displayed, showing the dispositions of troops using conventional symbols. If the map cannot give a good enough "feel" for the ground, another touch will transform the map into a practical representation of the view from any height and from any point on the map.

So you can see why no military technologist would have been impressed by the computers and their displays in the film *War Games*. By comparison to the real thing they were scarcely an improvement on sticking pins in a map. Indeed, the military technologists might well have sat back from their multi-million dollar masterpieces and dared their civilian counterparts to "copy that!"

Well, the computer games people have done precisely that and, given the difference in price, they've done a very impressive job. The games are designed for all those people who are attracted to war gaming but who don't have the time to paint lots of little models and then spend a whole weekend fighting a battle that in real life would have taken an hour.

One game I've shown my military colleagues is called *Eastern Front*, from Atari. It represents the German invasion of Russia in the Second World War. Having selected a level of difficulty, a map appears showing major terrain features, towns, and gives the dispositions of German and Russian tank and infantry corps. Of course, the whole of Eastern Europe doesn't conveniently fit onto a screen so you have to use the cursor to rove across the map. Thoughtfully, though, Atari provide a colour map so you can get an overall picture.

The computer plays the part of Stalin's commander and reacts to your moves as the German Army Commander. Having made your plans, you instruct your corps to move by putting the cursor over them and moving the cursor to the desired place, while the cursor is on the unit, so the strength of that unit is shown and how strong it was when it started out. Once you have given all your orders to your corps, the moves all take place simultaneously and, where two hostile units meet, combat is resolved to the sound of distant gunfire.

It may not be either as flexible or as sophisticated as the megabuck gear used by the military, but when I tried the game out with a Royal Engineer Officer and an Intelligence Corps Officer both agreed it was a lot more fun and was often embarassingly accurate in its results. For example, if you order a number of units to pass through the same spot at the same time they get into a muddle and get nowhere!

Eastern Front is probably the computer game that will take me longest to get bored with, if only because I have a queue of army officers who won't let me get near it because *they* find it so entertaining. □

Lady Bug

HINTS AND TIPS TO BOOST YOUR GAME TO A HIGH SCORE

* Your first objective at the start of each level is to eat all the hearts when they are blue. Try to do this by the shortest route, as each daisy eaten after achieving this is then worth more points.
* When you eat a vegetable from the Bug Box, the insects will remain stationary for a few seconds, so make the most of this valuable time and eat any daisies that are near the insects, or position yourself ready for the next meal.
* Use the skulls to your advantage and get the insects to bump into them. This gives your Lady Bug extra eating time until the insect once again emerges from the Bug Box. If your Lady Bug bumps into a skull, all the remaining skulls on that level will disappear. So, be careful – the more insects that die from bumping into skulls means more points for you, as every time one emerges from the Bug Box another vegetable appears. On the higher levels this could add up to a lot of extra points every time your Lady Bug manages to get to the Bug Box to eat one.
* Use the turnstiles to close off various parts of the maze to keep the insects in or out. There are two positions on the maze that will greatly assist you if you can manage to lure all four insects into them, as at these positions they seem to become dormant. If you do manage to get all the insects into this position, get your Lady Bug to eat as many daisies as possible before eating the vegetable in the Bug Box. Be careful, though, if you venture under the level of the insects they become agitated and swarm towards you.
* Try to gain an EXTRA Lady Bug before lighting up the SPECIAL letters. Some times the letters you need may not appear on the maze for ages, but be patient and they will eventually show up.
* Remember the higher the level, the faster the insects move. This also applies to the timing border. Alas, the higher the level, the slower your Lady Bug becomes – it must be all those daisies she keeps eating.

As yet I have only managed a score of 923,900 on Level 1. Have you beaten this? If so, let me know how many you have beaten me by. Happy eating! □

REVIEWERS WANTED

Do you own a home computer? Can you write? Send us a review of your favourite game and, if we like your review, we'll ask you to join our reviewer's panel.

Reviewers on our panel are sent the very latest computer cassette games, and after sending us their reviews, will keep the cassettes for themselves.

Details? Just complete the form below or a copy of it and send it to us with your sample review.

Style notes

Sample reviews should be 100-250 words, and should contain game value ratings (see "How good is the game?" in the Guide to Listings on page 48 of this issue of *TV Gamer*). Reviews appearing in Games from the Movies (pp 12-15) and the New Games (pp 45-48), will give an impression of the style required. It is only necessary to prepare one sample review.

To: The Editor, Review Panel, TV Gamer,
187 Oxford Street, London W1R 1AJ.

I would like to join your reviewer's panel. If I am selected, I understand that in exchange for writing reviews of game cassettes sent to me by *TV Gamer*, I will normally be able to keep the cassettes.

I own the following computer(s) and peripherals (include information such as cassette players, joysticks etc).

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If under 18, a signature of a parent or guardian is

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I enclose my sample review.

COMING SOON IN TV GAMER

In depth reviews: *Dave Harvey has been busy playing the VCS game,* ***Adventure****. Meanwhile, David Bishop promises very soon to write about his latest craze –* ***Atic Atac****. Watch out for them soon!*

Listings: *We'll be offering a microguide to the games-playing hardware available in Britain, with current prices and plenty of comments.*

New Games: *Our panel of reviewers is growing. Next month we're targeting 50 reviews of the newest cassette and cartridge games.*

Adventure Games: *Mike Lewis describes what he believes to be the best kind of game for computers – the Adventure game. Text games, games with graphics, games of skill and games of intelligence: they're all there, look for them in TV Gamer.*

Back Numbers

Our Winter 1983 edition contains a complete listing of Atari, Coleco, Intellivision and Vectrex-compatible games. All are reviewed by us and give hard-hitting opinions on value and playability.

Our first monthly issue, March 1984, covered: *In-depth Reviews* – Night Stalker, Pitfall, Mr Do; *Systems* – The new Atari 600X2 computer; *Games Delivery* – Guide to carts, cassettes, floppies, microdrives etc; *The Arcade Scene* – Lasergames; *Sky Wars* – Training fighter pilots in mega-buck simulators; *Special reviews* – Tank games.

TV Gamer's April 1984 issue covered *In depth reviews:* Yar's Revenge, Raiders of the Lost Ark (first part), *Systems:* The Sinclair computers, *The Arcade Scene:* Bubbles, Sinistar, Crystal Castles, Star Wars, *Special Feature:* Adventure games, *Interview:* Britain's own World Atari champs, *Battlefield Video:* How the military use computers to save on real weapons training. *Research:* US Psychologists give screen games the OK. *Special Reviews:* Space Cockpit games.

If you missed your copies, cut out this coupon or write, sending £1 for each copy required to the Back Numbers Department, *TV Gamer*, 187 Oxford Street, London W1R 1AJ.

Please rush me a copy (copies) of TV Gamer. ☐ *Winter 1983* ☐ *March 1984* ☐ *April 1984*

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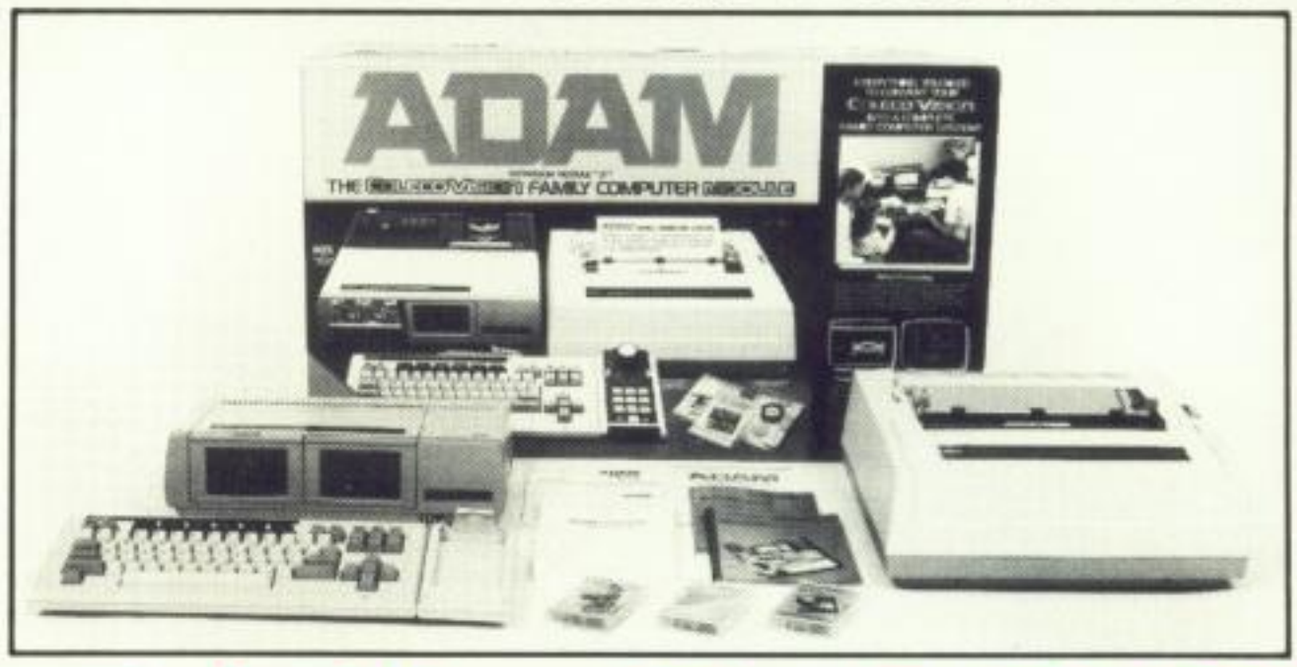

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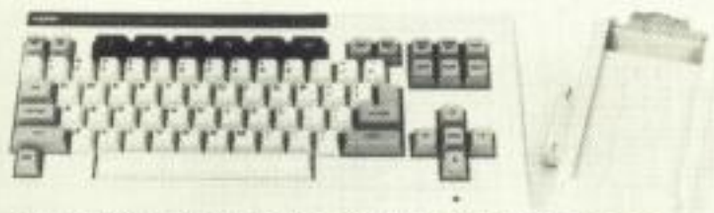

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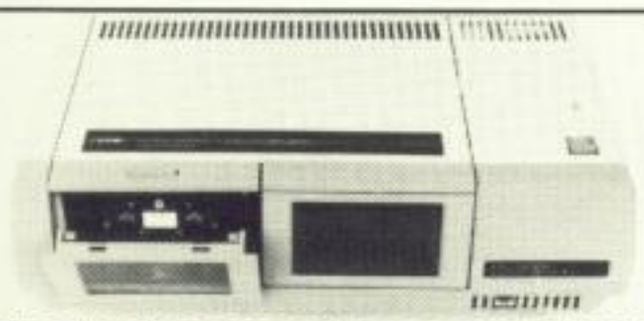

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MEMORY CONSOLE/DATA DRIVE: *The heart of the Adam system is the 40K ROM and 64K RAM memory console which combines with the 32K ROM and 16K RAM in Colecovision to give you a total of 72K ROM (including 24K cartridge ROM) and 80K RAM (expandable to 144K). Built into the memory console is a digital data drive which accepts Adam's digital data packs, a fast and reliable mass storage medium that is capable of storing 256K of information, that's about 250 pages of double spaced text! The console is also designed to accomodate a second optional digital data drive.

FULL STROKE KEYBOARD: The Adam keyboard has been designed as a professional quality keyboard that combines ease of use with an impressive array of features. It is stepped and sculptured for maximum efficiency and has 75 full stroke keys which include 6 colour coded Smart Keys which are redefined for each new application; 10 command keys which are dedicated to the word processing function, and 5 cursor control keys for easy positioning of the cursor at any point on the screen. You can attach a Colecovision controller to the keyboard to function as a numeric keypad for easy data entry. It can also be held like a calculator, a feature which makes working with numbers particularly easy. The joystick part of the hand controller can be used in the same way as the cursor control keys, to move the cursor around the screen.

LETTER QUALITY PRINTER: The Smart Writer letter quality daisywheel printer is a bi-directional 80 column printer which prints at a rate of 120 words per minute. It uses standard interchangeable daisywheels, so a variety of typestyles are available. The printer has a 9.5 inch wide carriage for either single sheets or continuous fan fold paper and uses standard carbon ribbons. It is comparable to many printers which cost as much as the total Adam package. The printer can be used either with the Adam's Smart Writer word processing program or as a stand alone electronic typewriter.

BUILT-IN WORD PROCESSOR: Adam comes with Smart Writer word processing built-in. This program is so easy to use that you only have to turn the power on and the word processor is on line and ready to go. Detailed instruction books are not necessary as the Computer guides you step by step, working from a series of Menu commands. It enables you to type in text, then completely edit or revise it with the touch of a few keys. Changes are readily made and a series of queries from the computer confirm your intentions, so that you can continuously double check your work as you type.

COMPATIBILITY WITH COLECOVISION: By using high speed interactive microprocessors in each of the modules, the Coleco Adam is designed to take additional advantage of both the 32K ROM and 16K RAM memory capability in the Colecovision. If you do not already own a Colecovision Console (£99 inc VAT), then you will need to purchase this when you initially purchase your Adam Computer package (£499 inc VAT), making a total purchase price of (£598 inc VAT).

WHAT IS COLECOVISION: Colecovision is one of the worlds most powerful video game systems, capable of displaying arcade quality colour graphics of incredible quality on a standard Colour TV set. The console (see picture bottom left) accepts 24K ROM cartridges such as Turbo and Zaxxon and is supplied with the popular Donkey Kong cartridge and a pair of joystick controllers. Colecovision has a range of licenced arcade hits available such as: Gorf, Carnival, Cosmic Avenger, Mouse Trap, Ladybug, Venture, Smurf, Pepper II, Space Panic, Looping, Space Fury, Mr Do, Time Pilot, Wizard of Wor and many others. So there you have it, Adam plus Colecovision the unbeatable combination. Send the coupon below for your FREE copy of our 12 page Colour brochure giving details on the complete Adam system.

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